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MANLY HARDY.

Courtesy of Forest and Stream Publishing Company.

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Manly Hardy.

Manly Hardy, one of the older and most widely known naturalists of Maine, an honorary member of the Maine Ornithological Society, died at his home in Brewer, Maine, December 9, 1910, at the age of 78 years and 28 days.

He was born in Hampden, Maine, November 11, 1832, the only child of Jonathan Titcomb and Catherine Sears (Atwood) Hardy. When four years old his parents moved to Brewer, and seven years later they bought the house which has ever since been his home.

His father, Jonathan T. Hardy, was one of the progressive business men of the Penobscot Valley, and had interests in shipping, lumbering, timber lands and general trade, but particularly in the fur trade. He had a wide acquaintance with those who dwelt in the wilds, both whites and Indians. The son, Manly Hardy, was sent to the public schools, and for the acquirement of the classics and higher studies to the private school conducted by the Rev. George W. Field, D. D., in Bangor. Ill health and a very serious affection of the optic nerves compelled him to abandon both his college course and his desire for service in the field of missions, though

his religious ideals were maintained throughout his life. December 24, 1862, he was married to Miss Emeline Freeman Wheeler, of Hampden, who survives him, together with four daughters and a son.

Turning through force of circumstances from his early ambitions, he entered the business career of a fur buyer and became remarkably expert in the judgment of the quality of pelts. In entering this career, his father's interests and acquaintance throughout the wilderness afforded rare opportunities which he turned to most excellent results. Fortified by the clean character built up in youth, he acquired wide, close and sympathetic acquaintance with the men of the wilderness. Many of these were Indians, and, entering heartily into their honorable pursuits, he became their rival in canoeing, trapping and general woodcraft, and an authority upon their language and history.

Respecting his life as a naturalist, the following sketch is furnished by his daughter, Mrs. Fanny Hardy Eckstorm, well known as a writer of articles and books on natural history.

"My father began being a naturalist very young. When about nine years old he tried to learn what he could about the more brilliantly-colored birds. In 1844, when he was in his twelfth year, Count Karl Luther, a Prussian nobleman traveling in America for sport and pleasure, spent some time in this vicinity and noticed the boy's interest in natural history. The Count gave such instruction as he was able and left with him a recipe for mummifying small birds, which we still have. In this way he preserved a few specimens; but he had neither books nor teachers.

"He never lost his childish desire to be a naturalist nor found any opportunity to learn what he wished to know, until in 1861 he had a chance to go upon the Maine State Scientific Survey. Despite two bulky volumes of reports, the history of this expedition never has been fully written; it was one of the things which 'are not what they seem.' On his part, though often urged to write his account of the survey as a burlesque, my father used to smile and say nothing. My father was given the position of assistant natural-

ist, being then in his twenty-ninth year, and one of the older men upon the expedition, if we except Dr. Holmes and old Dean Murch. He did not go because he thought he knew much natural history, but because he hoped to learn something, particularly the art of taxidermy. Dr. Ezekiel Holmes, editor of the *Maine Farmer*, was naturalist and head of the survey. He was a man of ability, but it would be no libel to say that he knew nothing about ornithology; and about taxidermy he knew considerably less. He could not skin a bird himself, nor tell anyone else how to do it, and had he not been thoughtful enough to provide the expedition with a little pamphlet published by the Smithsonian Museum, not a bird could have been preserved on the cruise. The chief part of the taxidermal outfit of the survey consisted of a large coil of *unannealed* wire about the size of hay wire. The Doctor planned to bring back all his trophies mounted, and for all of them the same wire was provided, Eagles and Hummingbirds to be treated impartially. The rest of the naturalist's equipment was cotton batting and arsenic. My father hunted assiduously for birds while the other men were resting and eating, and as the survey was short-handed and the water low, he abandoned his right to go as passenger and worked as hard paddling and poling a canoe as any of the boatmen, besides doing all the naturalist's work except writing the final report. The results were not of great importance, and when the great Portland fire burned up his collection of bird skins, I think he felt no regret over the loss.

“Having gone on a State Scientific Survey to learn about birds, and having found that there was nothing there to be learned, my father's scientific aspirations were nipped by a severe frost. It was many years before he made another attempt to study birds. Rarely he had one mounted. In my childhood a great Horned Owl, a little Acadian Owl and a pair of Goshawks, killed by his own rifle, were all the mounted birds he had. About 1874 he began to buy a few birds of plumage and had one small case of them to look at evenings when he could not read. It was not until 1877, when he was forty-five years old, that he made his first attempt at mounting a bird.

"I very well remember that first bird. Though I was a child, I assisted. We had Manton's little book on taxidermy, and I read the directions while father tried to follow them. The victim was a Robin. It would not have been so bad a bird had we, or the book, not forgotten to make an artificial neck before inserting the body. We have it yet, a first start toward large results.

"Once he had made a beginning, father resolved to do the work thoroughly. People laughed at him for starting at his age to collect all the birds in the United States. Yet since that day how have the number of known United States birds increased! And from the United States alone, his ambitions spread to include all North America and the parts faunally related. And yet he all but completed this greater task, and the most of those which he lacked were either extinct before he began his work or but one or two specimens of them have ever been taken. Of the geographic races he had by far the larger part, lacking comparatively few, and those usually the commoner ones. In addition, he had some very fine Pheasants and Birds of Paradise and a large collection of freaks and albinos.

"I could hardly name the best of his collections. In some cases the bird is valued for its rarity, in some for its plumage, in some for its mounting. I doubt if there are in the world better specimens of the Californian Vulture, the Guadalupe Caracara, the Harpy Eagle, the Great Wandering Albatross, the Scaled Petrel, and others, which were prepared by that artist among taxidermists, the late Mr. Critchley, of Providence. Among the greater rarities I should name the type specimen of the Black Merlin (adult), Peale's Falcon, a pair of the Masked Bob-white, Cory's Bittern, the Heath Hen, the Guadalupe Towhee, three fine Passenger Pigeons, the Whooping Crane, a magnificent pair of the great Imperial Woodpeckers, Ross's Rosy Gull, the Black-Masked Duck, and many others very rarely found in collections. His specimen of the downy young of the Scaled Petrel is believed to be unique.

"Father usually gave away his observations to others. He took no pleasure in holding any personal title to an observation, and

anything written by him in the *Auk* or the *Ornithologist and Oologist*, or other journals, was quite as likely to be culled from his personal letters to Mr. William Brewster or Mr. Joseph M. Wade, or others, as to be directly contributed. He was able at times to report rarities. For example, he had seen a Turkey Buzzard near home¹, and had heard of others being trapped or seen by hunters²; a few winters since he saw a Black Gyrfalcon³ but three or four rods away (and no gun); and he obtained some of the earlier nests of the Red-bellied Nuthatch⁴, the Golden-crowned Kinglet and the American Cross-bill, all near home. Still these were in no sense discoveries. His observation that the male of the Leach's Petrel⁵ more commonly has the bare brooding spot than the female, was a better note.

"Birds, mammals, Indians were his hobbies. In ethnology he established for the Peabody Museum of Ethnology the fact of cannibalism among our Maine Indians⁶. However, he did more through advice to others than by direct work. He was consulted upon all sorts of matters, and whenever a strange mammal or bird was taken within many miles it was quite sure to be referred to Mr. Hardy.

"Though not directly interested in other sciences, father was observant in all. He could at once tell you whether he had ever seen a given rock or flower, and when and where, so that, although neither geologist nor botanist, he was a good adviser.

"There was never a time when he 'began going in the woods'; he was born to it. With Indians for his playmates and hunters for his friends, he carried a gun from the time when another boy had to go with him, to rest the muzzle on his shoulder while my father took aim and did the shooting. He had an instinct for woodcraft, though by reason of his very delicate health between the years of sixteen and twenty, he was at that period less in the woods than most boys of his age. But about that time his eyes failed him, and,

¹Bull 3, Univ. of Maine, p. 57.

²*Auk*, XXII, p. 79.

³*Journ. Maine Orn. Soc.*, III, p. 28.

⁴Bull. Nutt. Orn. Cl., III, p. 196.

⁵Bull. Nutt. Orn. Cl., VI, p. 125.

⁶Eleventh Ann. Rept. Peabody Mus. Am. Arch. & Eth., p. 197.

being unable to read at all for years, he spent much of his time in the woods, gunning, trapping, or looking after the men employed by his father in the woods and upon his large farm. As a general thing, the gunning and trapping were merely incidental to some real business.

"Yet, beginning at about the time of his majority, he took long trips into the then unbroken forests of Maine, deer hunting, moose hunting and trapping, as well as to the seashore, where he learned with the Indians all their skill at seal and porpoise hunting, and the art of sailing a birch canoe in a heavy wind and sea. From 1852 until 1898 he had from one to three trips in the woods or to the coast each year. In September, 1897 he was taken very critically ill while camping at Cassobee's Lake and got out only by his own indomitable will and the devotion of the man with him. From that time on he never dared go into the woods.

"Father knew intimately most of Aroostook, Piscataquis, Penobscot, Hancock and Washington Counties, and also much of Waldo. The western part of the State was unknown to him and he never collected outside of Maine. Indeed I may say that he made but two real collecting trips that I can recall. These were both to the seashore. He went into the woods in the fall or winter at the season to hunt and cruise with most enjoyment. I have been off with him a full month when we brought back not more than two or three bird skins. Little insectivorous birds he would not kill, and his collection is scantiest in the commonest kinds. He never had but one Chickadee and not a female Robin. Of most of the commoner Warblers the collection has but a single specimen of each. Killing little birds and stealing their nests never seemed to him quite fit occupation for a man.

"I have no bibliography of father's writings. He never valued them nor preserved copies of them. The most was done for *Forest and Stream* and for *Shooting and Fishing*. To other periodicals he contributed only under pressure from the editors. I do not remember his writing for anything before the eighties and then it was the game wardens rather than natural history that led him to write for

the press. Of his writing I may mention one characteristic. He never overstated. His two longest writings, each of which filled several instalments of *Forest and Stream*, 'A Maine Woods Walk in '61' and 'A Fall Fur Hunt,' might have been much expanded if he had chosen to dilate upon his incidents. But he condensed as much as possible even while telling a story. In the 'Fall Fur Hunt,' he left out some of the most effective episodes, incidents full of color and woods life. There was one day when he had had three hair-breadth escapes, and he put in but one of them. I remonstrated with him upon this and told him that the others were interesting, too. 'I didn't want to make the broth too thick,' was his characteristic response. Not more than an hour before he took to his bed, dying the next day, he finished an article for *Forest and Stream* upon the otter. He was in great pain; he knew that the end was probably near, but he felt that he must stick to this article and finish it. It is the last thing that ever will appear from his pen. He left no notes, no manuscripts of any kind, and all his journals were very brief.

"Nearly all that father wrote had to do with Indians, the Maine woods or mammals. He wrote very little about birds unless it was in reference to changes of habits or to their intelligence. He felt that while birds were his special hobby, yet what he knew about animals was the rare part of his lifetime's acquisitions. This was unique, and though he did not enjoy the labor of writing he often felt it a duty to record what he and he alone knew. But by far the greater part of his information and almost all of his rich experience in the woods never was committed to paper."

Mr. Hardy's writings were relations of observations on little or obscurely known matters, and therefore stand as lasting contributions to the subjects on which he wrote. He also felt compelled to write occasionally in criticism or correction of matters in print calculated to prejudice or mislead readers of his favorite journals. In such cases his word was usually, if not always, final. In writing he responded to the generous impulses which governed his life and quite as often wrote for the benefit of inquiring correspondents as he

did where his name would appear. He never concealed his identity, though in a few instances he signed himself "M. H."; yet these were brief notes, of statements not open to reply, and the name of his town was given.

His first published writing seems to be on the "Nesting Habits of the Red-bellied Nuthatch," which appeared in the Nuttall Bulletin in 1878, which we observe to correspond very nearly with the period when his collection was begun. The same year Professor F. W. Putnam, in his report as curator of the Peabody Museum of American Archaeology and Ethnology, published the letter of Mr. Hardy which established the fact of cannibalism among the New England Indians. Professor Putnam made the statement that Mr. Hardy would conduct further investigations in behalf of the museum, and that these explorations were carried out is shown by the next (the 12th) report. Mr. Hardy's first letter in *Forest and Stream* appeared in 1884, entitled "The Wolf Cry in Maine," and stands as a valuable contribution to the history of the disappearance of this mammal from our fauna.

Among his numerous friends was the late Major Charles E. Bendire, with whom he maintained an intimate friendship, and to whom he contributed freely during the preparation of his work on the "Life Histories of North American Birds." The late Charles K. Worthen was a friend of thirty years' standing, and he knew well all of the most prominent field ornithologists of the West. Indeed, as most of his collection was derived directly from the original collectors, especially from those in the way of finding new species and races of birds, it would be easier to name the working field naturalists whom he did not know than those whom he knew.

While of a retiring disposition and averse to appearing in public, he occasionally responded to the requests of friends or associates and delivered talks upon natural history topics. On these occasions his remarkable memory and wide experience as an observer came to his aid, and, as he grew absorbed in his subject, he bore his audience onward with him, attentive to the end and ready for more.

In relation to his memory we must quote again from his devoted daughter :

"Few men have his quickness of retort and very few his marvelous memory. Everything he had ever seen or done was photographed there and kept forever. I have known him, without the aid of any notes, to enumerate over two thousand Ruffed Grouse which he had killed, for each one of which he could recall the place and circumstances. . . . It was this memory, which enabled him to bring forward a great number of perfectly definite facts to generalize upon, that made his observations so unique. All his facts were his own. He did not quote other men's books. He knew the books, usually very well, and he could cite page and volume when required to do so, but everything he said or wrote was original."

As a man he was genial in his intercourse with men and with a keen sense of humor ; steadfast and energetic in his purposes ; generous toward all mankind ; charitable in every way toward the unfortunate, giving freely and quietly ; modest in all well-doing, and zealous for truth and justice.

An Observation of the Development of the Social Instinct in Cedar Waxwings.

By CAROLINE M. STEVENS.

In "Birds of Laysan and the Leeward Islands," Mr. Walter K. Fisher gives an account of a most remarkable "dance" indulged in by the Laysan Albatrosses. It is a long and complicated performance by any two birds, with bowing and circling and fencing, tucking their heads under uplifted wings, snapping bills, tiptoeing, groaning, and so on, always in dignified and regular succession. Mr. Fisher counts it not courtship, since it is carried on throughout the birds' residence of about ten months on the island, but rather an amusement, an extraordinary development of the social instinct. Mr. Henry L. Ward, in an account of a Herring Gull

colony on Gravel Island, Wisconsin, tells of a similar, though much simpler, "dance" or "game."

Reading thus of distant colonial birds, one envies these fortunate men their opportunities for observing such strangely interesting traits. It is then especially a pleasure to discover that the common birds around our homes may have a development of the social instinct, if not so wonderful, at least nearly as fascinating to watch.

Coming through an apple orchard one noontime in May, 1909, I stopped to watch a large flock of Cedar Waxwings feeding on the apple blossom petals, and then it was my good fortune to see as pretty a sight as could be imagined among birds. The attention of the birds seemed about evenly divided between eating petals and playing a sort of game. Looking from tree to tree I saw it going on all around me.

It was a game for two. One bird, taking the initiative, with a petal in his mouth, suddenly flew to his chosen playmate, alighting close beside him on the twig, at the same instant offering the petal; (once it was a bit of green leaf). The other bird, though apparently taken unawares, was quick enough to catch it on the instant it was offered. Immediately, with the petal, he hopped sidewise just one small hop away from the first bird. After a pause of perhaps a second, back he came close to the bird and offering the petal, which the first bird on the instant caught from his bill, hopped away with it just one hop, paused a second, then very suddenly hopped back, offering the petal, all just as the other bird had done. And so they passed the petal back and forth, not three or four times, but twelve and fifteen times, until, tiring of the play, they flew apart, or the petal, with much hasty snatching from bill to bill becoming tattered and too small for use, was indifferently eaten by one of the birds.

In the moments of pause before the always sudden re-offering of the petal, each bird looked straight ahead; the one with the petal as if trying to conceal from the other the instant he meant to come back with it, and the one awaiting the petal as if the rules of

the game forbade his watching to see when it was coming. Yet he was plainly tense and watchful, and only once did I see a bird fail to get the petal. In that instance the other bird gave him another chance at it, when he got it all right, and the game continued. But for this element of competition, this apparent keenness to take the other bird unawares, which gave the spirit of a sport to the performance, it would have more the aspect of a "dance," for it was measured, dignified, and dainty, with the quality of an old-time minuet.

Certainly throughout the time I watched, it had no observable connection with courtship, however indirectly the mating season may be responsible for it. The choosing of a partner seemed wholly casual and disinterested, and when the game palled, the birds separated as casually. So matter-of-fact were all these birds, and so finished was their execution, that one might expect to find this pastime a common habit among their kind. Yet I have not again seen anything like it. (I have not had another chance to watch a large flock.)

Any mention of unusual development of the social instinct of Waxwings by authors I have read has been merely reference to an observation cited by Nuttall which Mr. Norton kindly sent me. Mr. Nuttall writes: "An eyewitness assures me he has seen one among a row of these birds seated upon a branch dart after an insect, and offer it to his associate when caught, who very disinterestedly passed it to the next, and each delicately declining the offer, the morsel has proceeded backwards and forwards before it was appropriated."¹

I saw nothing like this. Once three birds started to play, but the game didn't go smoothly and after one or two passages they lost interest and dispersed. Other than this instance, the performance I watched was unvaried. It is gratifying to have seen it so perfectly. Aside from the scientific interest, the charm of those dignified, dainty birds in graceful play among the sunny apple blossoms is as pleasant to the memory as a glimpse at fairies dancing.

¹A somewhat similar observation is recorded by E. H. Forbush, in "Useful Birds and their Protection," p. 210.

Notes on the Winter Birds of 1906-07.

By CORDELIA J. STANWOOD.

I.

FEEDING THE BIRDS.

When persons live in the country where the snow is deep and the thermometer sometimes runs as low as 36° below zero, necessarily there are days when the fireside is the most comfortable place. This was particularly true in the winter of 1906-07, a winter that the oldest inhabitants of Maine as well as scientific data affirmed to have been the most severe in fifty years. At this time of year to have the birds fly about the window and sing as if it were the cheeriest day in spring is an unspeakable comfort. Summer seems almost at hand.

To encourage my bird neighbors to visit me that winter, I kept bits of suet tied to a nail driven in at the side of each window of my room, and all over the large balm-of-Gilead tree in front of the house. (I made a sling by fastening a large piece of suet firmly to each end of a strong twine about a foot long just as boys make horse-chestnut slings to throw over telegraph wires. When I tossed these slings over a branch, they struck with such force that the cord was bound around the branch several times. The sling fastened itself so securely that the fiercest gales were unable to dislodge the suet.) After that one Chickadee came for a time, then two, next six and a Red-breasted Nuthatch. These visited the tree perhaps a dozen times a day.

The Nuthatch, for so handsome a bird, behaved very badly on his arrival. In the beginning, doubtless, he saw Chickadees coming to the woods with large bits of suet in their beaks. Perhaps he had feasted on these same particles of suet that the Chickadees had stored away in the bark. Next he followed the Chickadees and liked the suet so much that he decided if a little were good all would be better. Instead of eating, he spent most of his time in driving the Chickadees away from the suet tree. The Chickadees allowed the Nuthatch

to take the largest and most juicy bits of suet for himself, and were content with tiny crumbs in any out-of-the-way corner of the tree. This did not satisfy the Nuthatch. He simply refused to allow them a crumb. The Chickadees showed their optimistic spirit by viewing the whole matter as a joke, announced their arrival in a noisy chorus, then fled precipitately before the tiny tyrant, smaller than themselves. (The long, strong beak of the Nuthatch must have had an awe-inspiring effect.) In time association with the Chickadees improved the manners of the Nuthatch somewhat. He allowed them to feed, providing he did not want to partake of that special suet lump. Still, even a Chickadee pursued a Chickadee that had succeeded in filling his beak with a noticeably tempting mouthful of suet and quite often drove a Chickadee away from a desirable feeding place.

By March 12th the Nuthatch had selected a mate considerably smaller than himself. They came to the suet tree together after this, and were as belligerent as the first Nuthatch had been in the beginning. The Nuthatches lingered around until May 17th, but the Chickadees continued to come in smaller numbers while the suet lasted.

II.

GREEDY CHICKADEES.

Sometimes a large lump of suet became loosened and fell to the ground. If the Chickadees were around when I went to tie this suet to the tree, they scolded me severely.

One day I sent two children to perform the task. The Chickadees perched within two feet of their heads and did not cease Chickadeeing until the little people had completed their work.

Another day a large dog stood under the tree and sniffed at the suet. Even it did not escape a severe reprimand from the greedy little birds.

III.

THE SHRIKE AND THE CHICKADEE.

One cold morning I was puzzled by the conduct of a Chickadee that clung, back down, to the bottom of a large piece of suet. He

seemed utterly exhausted. I thought that the bird might be paralyzed with the cold. There he swung back and forth with the suet in the wind, his beak rubbing against the suet, but made no attempt to feed. He was apparently as helpless in the wind as the suet to which he clung. He seemed to look upward without moving his head. At last the Chickadee hopped to a branch, but still was a wooden bird, with a peculiarly cunning expression in his eyes. Just at this time I became conscious of a gray bird in the top of the tree, one that had haunted the neighborhood for days. Then it was that the Northern Shrike made a movement and the Chickadee quickly came to life and darted away. The Shrike hovered in air an instant, with wings and tail spread, and neck stretched forward and down, then darted after the Chickadee.

The flight of the birds was out of range of my windows. It was impossible to follow the birds through the deep snow without stopping to put on overshoes. There was no time for that, so I remained uncertain as to the actual outcome of the pursuit as far as visual knowledge was concerned. I have no doubt, however, that the Chickadee took refuge in the thick branches of a spruce at the corner of the house where the Shrike could not easily follow. If the little bird attempted the long flight across the open field, there was no hope for him.

IV.

FEEDING THE SPRING MIGRANTS.

From December to April, the Chickadees and the Red-breasted Nuthatches continued to visit the suet tree for a part of their food supply. Occasionally a stranger bird, such as the Redpoll Linnet, perched in the branches of the suet tree, or the White-winged Cross-bills came to feed on the spruce cones in the tree by the house, but nothing unusual happened until the first of April, when the two warm days preceding the last day of March were followed by a severe snow storm, accompanied by rain, hail and sleet. Then all the little migrants—Song, Fox and Tree Sparrows, Juncos and Red-winged Blackbirds—swarmed under my window to eat hayseed, crumbs of white bread, suet, oatmeal, in fact anything that sug-

gested a seed. Soon the Sparrows and Juncos detected the suet on the balm-of-Gilead tree. All day there was a constant stream of visitors awaiting their turn at the suet lumps. Often a Sparrow or Junco because so impatient that he administered a sharp peck at his neighbor who reluctantly yielded up his place. One Crow appeared. After eating the seeds for a time he observed the suet and flew to a slender branch of the suet tree, where he slowly but firmly settled. He was very awkward at keeping his balance and getting his long beak so nearly under his feet as to snip off bits of suet, but he succeeded so well that the lumps of suet rapidly diminished in size. The same day he returned with a friend, but I was such a conspicuous object in the window that they contented themselves with ronting the other birds and settling in the field opposite. A few days later, before I arose, the morning after the fresh suet had been placed on the tree, I heard a great cawing among the Crows around the house. Upon looking out I found the suet had been pulled from the tree and all of half of it carried away. I purposely tossed it so high that it was out of reach of the cats. There was no wind. I decided that the "robber Crows" were guilty of the theft.

It is said that everything has its "supreme moment." Surely this spring the rough, coarse, awkward old balm-of-Gilead had its "supreme moment." One of these white days it was clothed with Blackbirds. Truly it was a gorgeous sight! The black coats against the white snow looked like black velvet, and the bright splashes of scarlet and orange on their shoulders made them most conspicuous in the white and grey landscape. While the Blackbirds were here they were most peaceable. The small birds, however, usually beat a hasty retreat before them. They ate nothing but seeds.

The following brief pen-pictures are taken from my notebook:

April 9, 1907, 6.00 P. M. It is nearly 6.00 o'clock and the Juncos, Fox Sparrows, Song Sparrows, and possibly other birds, are feeding busily, while the rain and hail patter on them and the snow is six inches deep. Often they stop feeding and crouch in the snow to warm their feet in their feathers. These little birds teach one a

lesson of patience, for amid all these discomforts every little while a merry song ascends to the Giver of all good gifts.

April 10. It snowed all night. This morning when I arose there were many little birds in the trees in front of the house. Some had already scratched where the food was yesterday until the ground was in sight. I threw out some bits of bread. Soon the Juncos and Song Sparrows were struggling all over the lawn. Suddenly nearly all the birds took flight and disappeared. Simultaneously a fine Northern Shrike swooped down on a Junco which he missed. He made several other unsuccessful attempts and disappeared around the house in pursuit of a Junco. Later a Junco, a female, appeared with just two tail feathers. I wondered if it were she that was pursued by the Shrike and if her chances in the spring mating match are endangered. Later in the day, the little Junco lady appeared again with her two tail feathers so awry that they appeared as one. Fortunate lady that she does not possess a mirror! Let us trust that she has not an intimate and frank friend!

The Fox Sparrow, because of its size and dignity, takes precedence among the birds. He walks up, and, unless the treasure is an unusually large piece of bread, the delinquent who possesses it calmly surrenders it. If it is necessary, he delivers a vigorous peck, but he seldom has to. He was so bad as not to wait his turn at the suet tree to-day. The Song Sparrow that came to the balm-of-Gilead for food was quite amusing. He was annoyed by the cord that held the suet to the tree. As the cord would not give way before the well-planned strokes of his beak, after pecking at the cord he would dance upon it with all his might. He kept this performance up for five minutes. Probably the dancing was an effort to scratch on a branch. Roots on the ground that obstructed his effort to obtain food gave way before such vigorous treatment, I suppose he argued, why should not a root wound around a stick in air.

At 5 o'clock P. M., more than sixty birds were eating seeds or suet beneath the window. The space covered with seeds was about two yards long and one and one-half yards wide. Over this space

the Song Sparrow, Fox Sparrow and Junco were more or less regularly spaced—some three or more inches each way. If one intruded upon another a vigorous peck put him in his place at once. The seeds and hay were perhaps two inches deep in some places. Each little bird pecked and scratched until only his tail showed. At 5.00 o'clock, sixty were feeding; at 5.45 o'clock, fifteen were feeding; at 5.50 o'clock, nine were feeding; at 6.03 o'clock, one was feeding, which immediately left. All but one bird flew in the direction of the evergreens back of the house. The exception flew to a field sparsely covered with bushes and evergreens. In the morning Ruth found a little Song Sparrow frozen stiff under the telegraph wires.

April 11. Before 6 A. M., the birds were already uncovering the remains of yesterday's feast. I threw out some pieces of bread. They flew for it before it touched the ground. The birds were more than grateful. They sang, they twittered, they hopped, they skipped, they jumped, they dragged their wings, they flirted their tails and—must I say it?—they fought for it. In fact, they expressed their joy in every kind of language a bird can use. I was sorry that morning that I had given all the suet to the other birds when a little Chickadee came to both windows and begged very sweetly for food. First he sang at one window, then the other. Later he returned and sang a new song. I could not resist such a sweet beggar and sent for a new supply of suet at once.

April 12th was such a mild day and there were so few birds around, I threw out no more seeds.

It was the end of April before other varieties of birds began to arrive.

**Summary of Migration Report from December, 1906, to April, 1907,
Inclusive.**

	FIRST SEEN.	LAST SEEN.
Pine Grosbeak,	Dec. 13	Feb. 23
American Crossbill,	Dec. 16	
Redpoll Linnet,	Dec. 17	Apr. 21
Northern Shrike,	Dec. 29	Apr. 10
Pine Siskin,	Jan. 19	
White-winged Crossbill,	Jan. 23	
Crows,	Mich. 16	

Junco,	{		
Robin,	{	Mch.	22
Shore Lark,	{		
Fox Sparrow,		Mch.	24
Bluebird,	/		Apr. 21
Downy Woodpecker,	\	Mch.	25
Song Sparrow,	/		
Red-winged Blackbird,	\	Mch.	30
Woodcock,		Mch.	31
Tree Sparrow,		Apr.	2
Hudsonian Chickadee,		Apr.	7
Hermit Thrush,	/		
Savannah Sparrow,	\	Apr.	27
Myrtle Warbler,	{		
Golden-crowned Kinglet,	{	Apr.	28
Tree Swallow,			
Yellow Palm Warbler,		Apr.	30

Time of Incubation of the Ovenbird.

Age at Which the Fledglings Can Leave the Nest.

By CORDELIA J. STANWOOD.

June 26, 1910, while passing from an evergreen growth to a deciduous growth on moist land, I was startled by the call of two little birds that fluttered around me, one dragging a helpless wing. Immediately I recognized them as Ovenbirds. I was afraid I had injured their nest. After examining a space for my feet in the dim light, I got down on my hands and knees and went over the ground minutely. The birds fussed a time, then left me. I saw no trace of a nest. As I walked forward into an open space, I noticed a heap of moss directly in the path I had indicated by broken branches a few days before. But for the outcry of the little birds, it seems probable that I should have stepped on the frail structure. Upon examining the nest, I found that it had no lining.

June 29. The nest contained one egg.

July 2. 11 A. M., I felt four eggs in the nest. 2 P. M., bird not incubating.

July 3. Did not visit the nest of the Ovenbird in the morning. 3 P. M., the bird was incubating. Her head extended outside of the nest. She remained motionless. Apparently she thought she was unobserved.

July 13. 4.30 P. M., visited the nest of the Ovenbird. The bird was entirely inside. One would never have suspected that a bird was concealed within that little mass of moss and leaves. When I knelt before the nest the bird flew forth with an explosive report of the wings. She flew about two yards to a place of concealment, but made no sound. The eggs were still unhatched.

July 14. When I went to the nest in the afternoon the dam drew herself in out of sight and remained perfectly quiet. At last, when I became very close, she hopped with outspread wings to the covert she sought yesterday. She uttered no sound. Four little birds were within the dark recesses of the nest, but I could see almost nothing as the entrance of the nest was toward the east. This was the twelfth day of incubation. The young were undoubtedly hatched in the morning.

July 19. 2 P. M., visited the nest of the Ovenbird the beginning of the sixth day. About all I could see was the yellow beak of one young bird. The young seemed to be dark grey-brown in color, similar to a young Nashville Warbler or a young Junco (I am sure of their coloration, as in 1909 I found a nest of quite mature birds, the entrance facing the north and in a good light). The parent birds called *cheh, cheh, cheh*.

July 22. End of the eighth day. On my way to the nest of the Ovenbird in the morning, I was greeted by one of the parent birds that flew through the trees with erected crest, calling. The nest was empty.

There was a heavy shower the night before and the little domicile was very wet. This may have hastened the exit of the young birds. The fact that the parent birds knew that their nest was discovered undoubtedly added to their anxiety to leave. The solicitude of the parent birds showed that the young were in the neighborhood. The entrance to the nest had been disturbed in nowise. A spray of moss still hung across it. Several masses of fresh excrement just outside the nest would tend to indicate that the young had but now come from it. The structure was so full of quill casings

that they not only filled the crevices of the nest, but sifted through the bottom and covered the ground.

The nest occupied a cavity in the ground about one inch deep in the centre. Around the edge of the excavation were maple leaves and pine needles. (The ground around was swampy, covered with sphagnum moss, white birch and maple leaves, sensitive and New York ferns.) The saucer-like part of the nest, even with the ground, was made of pine needles and dead leaves. It was roofed with pine needles, white birch and maple leaves, *Hypnum schreberi*, fern moss, stipes of ferns and bracken, and the fruit stems of maple. One or two sensitive ferns had grown through the nest and the little mound of dead leaves and moss was not in the least conspicuous.

Notes on Washington County Birds.

By C. H. CLARK.

I have recently added to my collection a pure albino Cuckoo, which was shot in this town, October 24th, 1910.

The most interesting thing of recent record is the occurrence of the Mockingbird in this vicinity. The first appearance was November 19, 1910, when one of the species was found in the village. At first it was thought that it might be an escaped cage bird, but later two were reported, and then a few days afterward three were seen together and were observed at several places within the radius of a mile. I closely and carefully observed them hours at a time on a score of occasions, and at times would get within the distance of a few feet from them. They spent most of their time in orchards and about dooryards, where many people threw various things for them to eat. I never knew of them being here before and I think their late occurrence remarkable. They have remained here all winter and the last report was February 26th.

Purple Finches have been very plentiful this winter. March 1st I had pleasure in watching a flock of seventy-five feeding in an old grain field from which the snow had disappeared. About ten per cent. were males in good color.

The Journal

of the

Maine Ornithological Society

A Quarterly Magazine Devoted to the Study and Protection of Birds

Vol. XIII

Published March, 1911

No. 1

SUBSCRIPTION RATES: \$1.00 a year; 25 cents a copy

The Maine Ornithological Society comprises in its membership the leading ornithologists and bird students of Maine. The membership is constantly increasing and the interest in the Society was never greater than now. If you are interested in birds and wish to know more about them you should by all means send in your name for membership in this Society. The dues are one dollar a year, and payment of this sum entitles each person elected to membership to the JOURNAL free of charge. Application for membership should be made to the Secretary, Mr. Dana W. Sweet, Phillips, Maine. Mr. Sweet is also the Treasurer and the annual dues should be paid to him. All persons, both young and old, are eligible to membership. It is not necessary for one to be versed in bird lore in order to insure his election to this Society. The larger the membership the more can be done in the way of improving the JOURNAL and increasing its size. Send in your name without further delay. The Society will be glad to welcome you to its meetings, which are held once a year in different cities.

It has been found necessary to hold the report of the proceedings of the November meeting of the society until a later issue of the JOURNAL.

The indexing of the first twelve volumes of the JOURNAL has been carried out, and is now about ready to be put in form of manuscript, therefore the completion of the work is practically assured.

A considerable number of ornithological publications and nature magazines have been received, but mention must be deferred to a later time.

During the current session of the legislature, upwards of one hundred and twenty-three bills, petitions and other matters have been referred to the committee on Inland Fisheries and Game. Of these about a dozen relate in one way or another to birds. Space for a discussion of these is not now available, but it is gratifying to note that the greater part of these are progressive. On the other side we are reminded, by inquiring into the cases, that those persons asking for the passage of retrogressive measures are insistent to the last degree. It is pleasant to remark that the committee is one from which excellent results on the side of progress are to be expected.

Bird Notes.

Notes and observations upon bird life within our State are earnestly desired from all our readers for publication in this column, and should be sent to Louis E. Legge, 22 Dow Street, Portland, Maine.

AN OVENBIRD INCUBATING TWO EGGS.—June 14, 1910, an Ovenbird was incubating two eggs. June 18th, the bird was absent from the nest, but the eggs were warm. June 20th, the nest was deserted. One egg appeared to have been sucked. The other was so sticky that a few of the white hairs of the perpetrator of the crime were glued to it. The nest was conspicuously placed in an open, deciduous growth, beside a pathway and only partially roofed. On the opposite side of the footway was an evergreen timber. The structure was rather loosely constructed of beech and maple leaves, a little *Hypnum schreberi*, fern moss, a few pine needles, and a little hay. It was lined with leaves and a few horsehairs. The eggs were marked with rufous brown and chestnut. They were slightly spotted all over; one was wreathed around the larger end with dots, the other had the spots on the crown. I discovered the nest by hearing the bird fly as I was walking in the woods. While I was searching for a possible nest, the bird flew back and forth among the trees, but uttered no sound.—*Cordelia J. Stauwood, Ellsworth, Me.*

EARLY ARRIVAL OF THE WINTER YELLOWLEGS (*Totanus flavipes*).—I saw a Winter Yellowlegs to-day, the first arrival here this year, April 7, 1910.—*Fred S. Walker, Pine Point, Maine.*

A LATE MEADOWLARK AT GOULDSBOROUGH.—While at Corea, in the town of Gouldsborough, Maine, early in November, 1910, I saw a Meadowlark on the 11th, 12th and 13th. It usually fed on a sea beach, and was wild, rising and taking a wide circle to some other place, but soon returned to its piece of beach. Though I remained until November 15th, it was not seen after the 13th.—*Arthur H. Norton, Portland, Maine.*

LATE NESTING OF THE HERMIT THRUSH.—August 15, 1910, I found a Hermit Thrush's nest with three eggs. The nest was in

the top of a spruce scrub, and was three feet above the ground. The spruce was eight feet north of the highway, on closely fed grass land, but there is a maple grove on the south side of the road. I visited the nest August 24th and found three well-grown Thrushes. I went to the nest August 29th and found it empty. This nest was not far from where I live, and on one of the most traveled roads in Avon. The Hermit's nest is built on the ground about June 1st, and has a set of four blue eggs, smaller than those of the Robin.—*Dana Sweet.*

NOTES ON FEEDING WINTER BIRDS.—During the winter a pair of Downy Woodpeckers have been in the vicinity. January 20th, 1911, I saw one watching the Chickadees feeding on suet. This I had tied to the tips of the most slender twigs on the top of a lilac, quite out of reach of the cats. The following day I drove nails into a telegraph pole close to the suet tree, and after wrapping chicken wire about the pole hung suet there for the Woodpeckers. (The loose rope of chicken wire seems to look dangerous to cats. They never go near it.) The Woodpeckers found the suet early in the morning and fed there and at the suet tree. February 8th, I was surprised to notice the male Woodpecker hanging from the bottom of one of the larger lumps of suet on the tree just as a Chickadee does but after an improved fashion. His back was parallel with the ground. He raised his tail at right angles to his back and pressed it against the suet. When he pecked at the suet his beak was parallel with his back, and his tail, pressed firmly against the suet, prevented the suet from giving way before the blows of the bird's beak. He hung there for some minutes. At the beginning of the cold season, I filled a stump, formerly used by a Chickadee for a nest, with corn, oats, apples and apple cores. I also threw some corn on the ground. The stump was situated near the boiling spring in the woods where I find the Pine Grosbeak, Chickadees and Partridges drinking. The tracks around this stump have been very interesting after snow storms. Squirrels, Partridges and Chickadees, at least, have fed there. After a severe snow storm, the

Partridges always come and scratch up the corn. During settled weather they seem to prefer to forage for themselves. One day I followed fresh Partridge tracks in hip rubber boots, and flushed a Partridge from the snow where it was burrowing to the green plants under clumps of evergreens. The Chickadees may be seen at any hour of the day eating from the grains of corn. They pick up a grain in the beak, carry it to a limb, and hold it there with both feet while pecking out the germ. The rest of the grain of corn they drop to the ground. At first I thought this was the work of a squirrel.—*Cordelia J. Stanwood, Ellsworth, Me.*

NARROW ESCAPE.—While out driving the afternoon of February 22nd, I noticed two birds flying at a height of about two hundred feet and soon perceived that one of the birds was in pursuit of the other, which was only about half as large. They were flying in a circle, which gradually narrowed until the larger bird was quite near, when the smaller bird dodged suddenly and flew off at a tangent, pursued by the larger bird, and as the pursuer drew closer the circling began again, the birds rising higher and higher with each revolution. These tactics were gone through with several times, and the birds rose to such a height that the smaller one was nearly indistinguishable, and I watched with a good deal of interest for the climax of the tragedy which I felt sure must soon ensue, when suddenly the larger bird gave up the chase and flew down and disappeared among some evergreens, while the intended victim took an opposite direction and was soon lost to view. During the time neither bird uttered a sound and I was unable to identify the small one, though it was probably a Redpoll. The large one I had no difficulty in recognizing as a Northern Shrike.—*Fred B. Spaulding, Lancaster, N. H.*



YOUNG CHICKADEES.

The Journal

of the

Maine Ornithological Society

Published by the Society on the first of March, June, September and December

Vol. XIII

JUNE, 1911

No. 2

A Study of Two Chickadee Families.

By CORDELIA J. STANWOOD, Ellsworth, Maine.

The gleeful chatter of Chickadees so intent on nest-building that they forgot to be cautious, revealed their secret to me one mild, bright morning in early spring. Making my way around brush heaps, and through the firs on the border of an overgrown pasture, I came upon the pair hollowing a gray birch stump in a comparatively sunny spot. The stump was four feet high, sheltered by firs and so decayed and rickety that a slight puff of wind might easily blow it over. The birds were removing all the wood from the top of the stump, leaving but a shell of bark. These Chickadees seemed bent on constructing a well ventilated nest.

The following day, May 8, 1907, passing through a rather dense evergreen grove near the house, I heard what sounded like a Woodpecker excavating a nest. It proved to be a Chickadee, hollowing a poplar stump of quite solid, dead wood. Later, this domicile re-

sembled a Woodpecker's nest so closely that a bird student who came to examine it declared that it was a Woodpecker's nest that the Chickadees had appropriated, until I testified to watching the Titmice day by day as they shaped the pouch-shaped receptacle for their eggs.

As time went on, I found that not only were the two nests quite different, but the two families were entirely unlike. The first nest was located in a more or less open, sunny space, the second in a comparatively thick, shady grove. The nest in the birch stump was open, the nest in the poplar stump was roofed. The inhabitants of the pasture nest were confiding and gentle, the occupants of the grove nest were suspicious and timid. Since all Chickadees have similar methods of constructing a nest and rearing young, it seemed best to study details of Chickadee life in the unroofed nest and annoy the timid little folk of the dark grove as little as possible.

The Chickadees, while at work on both nests, labored in the afternoon at times, as well as in the early part of the day. The method of procedure was as follows: One bird flew down, perched on the edge of the nest, dropped to the bottom and returned with a beakful of wood. This it carried to an adjoining tree and dropped. Then it flew again to the nest, ready to take the place of the mate that was repeating exactly its activities. Once in a while the first bird lingered to pick up a grub, and both birds were perched above the nest, ready for work at the same time. Usually, however, they came and went, ascended and descended with the regularity of a steam shovel. Often as I stood near the nest in the pasture, the Chickadees flew over my head, almost touching it, but made no sound save an occasional *seep*.

May 22, both sets of Chickadees were lining their nests. I found later that the birds in the grove began to incubate a few days earlier than the first Chickadees I discovered building. As the birds laid their eggs, they covered them with the nest lining. It was only when flushed from the nest that the incubating Chickadee revealed her seven white eggs speckled with brown.

June 14, when I attempted to drive the Chickadee from the first nest, I was unable to do so, so I sat down a few feet away to wait for developments. Soon I heard *phce-bee*, *phce-bee* in the distance. The call sounded nearer and nearer. Then a faint *peep* came from the nest. Next the *phce-bee* was answered by a *phce-bee* from the nest and the sitting bird fluttered away to meet her mate. There were two young just out of the egg. By afternoon all the eggs were hatched, just twelve days from the time the bird began to incubate the full set.

The following scenes at the nests will illustrate the difference in behavior of the two Chickadee families toward an observer. June 23, I visited the nest, in the grove on my way to the more distant nest. As I attempted to look into the nest, the young bird on top uttered a sound, something between a hiss and a very small explosion of gunpowder. It was so unexpected and given with such force that I jumped. While I waited near, the parent birds came with food. The male (as I supposed) refused to do anything but scold during the time that I remained. The female brought food twice, and carried away ordure once, but she acted with such trepidation that I soon withdrew.

At the latter nest, the little birds opened their beaks for food, and called and quivered as they do when the parents bring them nourishment. These young birds never seemed to possess the same sense of fear that the birds in the dark, close nest acquired. Soon after I came to the pasture nest, I heard not far away *peep*, very faintly; again *peep*, a little nearer; then *phce-bee* just above the nest. The parent bird had come with a long caterpillar and several moths in her beak. These she fed the nestlings and hurried away. The mate brought two moths at least, in his bill. Thus they came and went constantly. When both met above the nest, they flirted their tails, fluttered their wings and quivered all over in an ecstasy of delight. The parent birds were always a-tremble when they entered the nest.

June 26, the young birds in the house in the poplar stump were

perfect reproductions of the old bird. The nest was so full that the parent birds fed the young from the entrance. The latter must have rested one upon another, the diameter of the nest was so small. Those at the top thrust up their heads on each side of the top bird, but how the very bottom birds breathed was a mystery. The aperture at the top measured but one inch by one and a half. That was the only air hole.

In the home in the gray birch stump, the young birds arranged themselves around the middle bird in much the same way as the eggs were arranged, six around the central one. The opening at the top was three times as large as that of the poplar stump, and there were many air-holes in the bark cylinder that held the nest proper.

Two days later the Chickadees of the grove were gone early in the day.

The morning that the Titmice of the pasture were twelve days old, I had them photographed. My idea was to cut off the top of the birch bark cup and then replace it after the photograph was taken. The nestlings adapted themselves to their new quarters admirably. They snuggled down in the somewhat limited space as much at home as they had been in the more roomy abode. The old birds came and fed the young while we were arranging the camera, and twice while the camera was being focused, alighted on the edge of the nest with food. When once the top of the nest had been removed, it was impossible to replace it again, but after cutting the bark cylinder open, we fastened it at one side so that it sheltered the nest somewhat.

In the afternoon the old birds were feeding the young just as placidly as if no one had tampered with the nest, and as if there were not an observer perched within a few feet of them. The fare consisted of green caterpillars, an inch long, moths, spiders, an insect like a flying ant, and white grubs one-fourth inch in diameter and one inch long. All these were swallowed with apparent avidity. Once the bird brought a caterpillar an inch and a half long.

Putting the end in the throat of one bird, it tore off the other half and presented it to another nestling. Each little bird, in turn (and sometimes two strove for precedence), elevated itself to the backs of the other birds. It first stretched one wing or extricated it from the bird-tangle, then the other. Next it pecked vigorously at the base of the tail and opened and closed its mandibles a number of times as if to wet them with the oil it had obtained from the oil gland on the rump. Taking each feather at the base between the tips of the bill, it drew the feathers sharply through the beak. Thus it provided itself with a waterproof coat; thus it kept its feathers smooth and tidy; thus it removed, by degrees, those troublesome feather cases; thus it exercised every muscle in its small body and grew strong. In the end the little wing looked as if it had been pressed with a hot flatiron. The nestling remained on the backs of the other birds until the parent came with food. After the old bird had thrust a caterpillar or spider into the throat of the one or two that seemed to respond most vehemently, she clung firmly to the nest and held herself off as far as she could. The nestling then on top, having been fed, deliberately stood with the front of the body and head lowered, and expelled excrement which the parent bird received in its beak. This act of the little bird was performed with such force that the spaces between the feather tracts of the little body became pink and the veins stood out full and purple particularly on the thinly feathered extremity. I saw the young birds exercise and refresh themselves ten times in the space of about a half hour. The nestlings were quiet but a few instants at a time. They used every muscle almost constantly. I never have seen such muscular, well-groomed little birds in any other nest. The parent birds both carried ordure from the nest. They received the excrement in their beaks, bore it away to a branch, where they dropped it and wiped their beaks on a limb or a lichen. No matter how restless the little bird became while waiting for the care of the parent bird, it never soiled the nest. At 7 o'clock at night the parent birds were performing with unabated vigor the same round of duties that had occupied them during the day.

The following morning the Chickadees looked as if they were really enjoying the greater amount of fresh air the modification of their nest permitted. They were squirming about when I approached but soon snuggled down into place as they saw me nearing the nest. I seated myself on the ground less than four feet from the stump; occasionally a little head was thrust above the edge of the nest and, a pair of black, beady eyes regarded me intently for an instant, then the owner snuggled back into place. I counted six birds in the nest, and after a while discovered a sturdy young Chickadee in a tree just over the stump. Both parent birds devoted a great deal of time to this morsel of Chickadee flesh. Truly, it was a most interesting young bird. To be sure its *Chickadee* was in baby language, and sounded a bit like *tweedledee*, but that was to be expected. The first time I saw the bird move, it flew a yard and did very well. In its next short hops among thicker branches, it almost lost its balance two or three times but always succeeded, at last, in grasping a branch. At once the second, I believe, fell from the nest, but it immediately gained a footing by vigorously flapping its wings and grasping with its sharp claws. This tiny Chickadee had such a time clinging to the branch that I put it in the nest again, for which it ungratefully hissed at me.

Very soon after I took up my stand near the nest, the parent birds came to the edge of the nest with beaks laden with moths, spiders, and caterpillars. While the eager nestlings were pleading for food, they flew away to the fledgling in the tree and fed it. They continued to bring this little fellow food until the young bird refused to open its beak. At this early hour the parents seemed intent on tolling the young from the nest. Probably my presence so near the nest and in full view, made some difference in their plans. At least, they made no further efforts to tantalize the young with food while I was there.

Just at this stage one of the parent birds did a peculiar thing. She plunged head downward, or burrowed would be better, under the nest full of birds and lifted them all on her back. Before leav-

ing the nest, the bird came up on the other side of the young and remained for a few minutes facing in the same direction as the nestlings, then flew directly from the nest. After the nest was vacated, I found that the lining and soft wood beneath was full of large grubs. I think that the bird was removing these from the nest, as the young Titmice were very restless before the old bird cleansed the nest, but afterward settled down for a nap.

That evening the most precocious nestling was still in the tree above the stump. As it was cold and damp and the bird within arm's reach, I attempted to return it to the nest. Twice it escaped from me with a hiss. The third time I succeeded in bringing it to the nest-side. It immediately turned as if in disgust, and, seemingly choosing the lesser of two evils, hopped to my finger. Its claws were so sharp it was painful to have the mite grasp my finger so firmly. I put it in the nest again, but it scrambled like a flash up the piece of loose bark into a dead tree. After resting and feeding twice, it ran up an almost branchless trunk, flew to another naked trunk and ran up that to the thick branches above. When it escaped from me the second time, it flew easily from twelve to fifteen feet.

The morning of June 30, the rain fell in sheets, but I put on overshoes, and, taking an umbrella, hurried to the woods. The nest was empty but dry. The young birds were chirping in the treetops, and the old birds were feeding them. I regretted that they had such a wet day on which to celebrate their fifteenth birthday, but they seemed strong, happy and hungry.

I turned over the lining of the nest. It was three inches deep and contained plant down, rabbit's hair and moss. It was literally permeated with grubs one-half inch long by one-eighth to one-fourth of an inch in diameter. The odor of the nest this damp morning was most offensive. I have found this to be true of five other nests I have examined. The gray birch stump was excavated to the depth of twelve inches. The stump was three inches in diameter. A vertical section of the nest would represent a hollow cylinder with rounded base. (Fig. 1.)

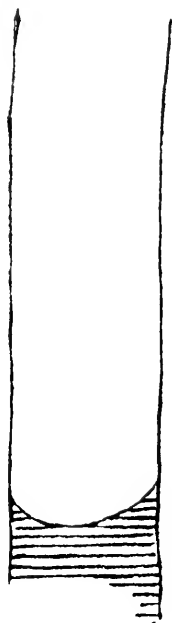


Fig. 1.

The poplar stump, the abode of the second family of Chickadees, was excavated to about the depth of ten inches. The lining consisted of fern down, fern moss, and hairlike fibres of cedar bark. The mouth of the nest measured one by one and one-half inches. The stump was two and three-eighths inches in diameter. It looked as if it were excavated to the bark at the bottom. The bark was not more than one-eighth of an inch thick. A vertical section of this nest was not unlike that of a pouch drawn in at the top. (Fig. 2.) In the first nest the wood was so badly decayed I think it was impossible to remove any without removing all. In the second the wood was comparatively firm.

The nest reminded me of a Woodpecker's, as I have said before, except that in all Woodpecker's nests I have found the entrance has been on the side, the tree trunk forming the roof. The entrance to the Chickadee's abode was in the roof. It was also smaller than a Woodpecker's nest.

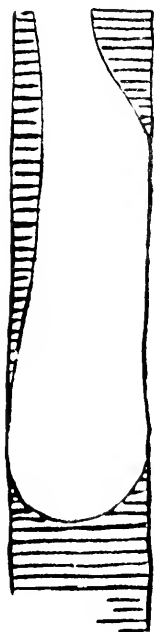


Fig. 2.

Fifteenth Annual Meeting.

The fifteenth annual meeting of the Maine Ornithological Society convened at Portland, Nov. 25, 1910, in the lecture room of the Portland Society of Natural History.

Vice-President, J. M. Swain, called the meeting to order.

Mr. Arthur Norton read a letter of greeting from the President, Dr. H. H. Brock, who was unable to be present on account of illness.



CHICKADEE'S NEST IN POPLAR STUMP.

The reports of the Secretary and of the editor were presented and accepted.

The following committees were appointed:

AUDITING COMMITTEE:—Dr. A. L. Chase, Miss Helen Lewis and Miss Sara Eastman.

RESOLUTIONS:—Mr. D. W. Sweet and Miss Sara Eastman.

NOMINATIONS:—Mr. A. H. Norton, Mr. D. W. Sweet and Mr. Hiram Ellis.

Mr. Norton gave a report of progress on the JOURNAL index.

The future policy of the JOURNAL was taken up for consideration, and remarks were made by Mr. Norton, Mr. Ellis, Mr. Sweet, Mr. Swain, Miss Eastman, Miss Lewis and Mr. Rich.

On motion of Mr. Norton, voted that this matter lay upon the table until to-morrow.

Mr. Swain brought before the Society the need of better bird protection, and this matter was discussed by several of the members.

On motion of Mr. Sweet, voted that a committee be appointed to consider changes in bird laws, with a view to bringing the need of same to the attention of the Legislature at its next session.

The following committee was appointed:

A. H. Norton, Walter Rich and Silas Adams.

FRIDAY AFTERNOON.

The afternoon session was devoted to the reading of the following papers and the exhibition of lantern slides:

“Two Chickadee’s Nests,” by Cordelia Stanwood, was read by D. W. Sweet in the absence of Miss Stanwood.¹

“An Observation of the Development of the Social Instinct of the Cedar Waxwing,” by Miss Caroline Stevens.²

Mrs. Sarah Abbott gave a talk on “Additional Observations on Robins and Hermit Thrushes,” illustrated by lantern slides.

¹This Journal, XIII, p. 25.

²Ibid, XIII, pp. 9-11.

Mr. Arthur Norton gave a talk on "Harlequin Ducks," illustrated by lantern slides. This was followed by many other slides of special interest. Mr. Norton also gave a talk on bird banding.

The following interesting specimens were placed on exhibition by Mr. Norton:

Turkey Buzzard, taken at Cape Elizabeth, Me.¹

Little Gull (*Larus minutus*), taken at Pine Point, Me.²

FRIDAY EVENING.

The evening session was occupied by a talk on "Birds of Maine and Their Nests," by Mr. Arthur Norton, and was illustrated by about ninety lantern slides.

SATURDAY FORENOON.

Vice-President, J. M. Swain, called the meeting to order at 10.00 A. M.

The minutes were read and approved.

The Secretary read the following list of names of members who had been admitted since the last annual meeting:

Harry Hathaway, Providence, R. I.; Harry Oberholser, Washington, D. C.; Earle Knapp, Farmington, Me.

On recommendation of Mabel Daveis, May Baker, Bingham, Me.

On recommendation of Cordelia Stanwood, Annie Stockbridge, Ellsworth, Me.

On recommendation of Bertha Brown, Madeleine Giddings, Bangor, Me.

On recommendation of Dr. O. W. Knight, Arthur M. Winslow, Worcester, Mass., and Cyrus Winch, Bangor, Me.

On recommendation of J. M. Swain, Miriam E. Brackett, Phillips, Me.

Miss Elizabeth Russell presented the name of Miss Martitia M.

¹Auk, XXVII, pp. 447, 450.

²Ibid, XXVIII, pp. 263, 264.

Moore, of Gardiner, Me. The Secretary was authorized to cast the ballot for the Society, and she was declared elected.

The Auditing Committee reported all accounts correct.

The Committee on Resolutions reported as follows:

Resolved, That the Maine Ornithological Society extend its thanks to the Portland Society of Natural History for the use of its rooms for our annual meeting.

D. W. SWEET,

SARA EASTMAN.

The Committee on Nominations reported, and officers for 1911 were elected as follows:

PRESIDENT:—J. Merton Swain.

VICE-PRESIDENT:—Dr. W. C. Kendall.

SECRETARY AND TREASURER:—D. W. Sweet.

COUNCILLORS:—J. F. Fanning, Dr. A. L. Chase.

Voted, that the council be empowered to fill any vacancies in the offices.

The future policy of the JOURNAL was taken from the table and further discussed.

Mr. J. H. Emerton, Secretary of the New England Federation of Natural History Societies, gave a talk on "Robins' and Phœbes' Nests."

The meeting was then adjourned.

DANA W. SWEET, *Secretary*.

Henry A. Purdie.

Henry A. Purdie, one of the founders of the American Ornithologist's Union, a man prominently identified with the history of New England ornithology, died in Boston, March 29, 1911, in the seventy-first year of his age.

Though for a number of years Mr. Purdie has done no literary work in ornithology, he has always kept abreast of the times in this

field. While never a voluminous writer, he has contributed very materially to the correction and addition of records of New England birds, their distribution, and their habits. This is nowhere better shown than in the pages of the Bulletin of the Nuttall Ornithological Club, and The New England Bird Life, by Stearnes and Coues.

His principal published contributions to the ornithology of Maine are as follows:

1876. Correction of the record of the Arkansas Kingbird, taken at Eliot, Me.¹ This appeared in his review of Dr. T. M. Brewer's Catalogue of New England Birds.

1876. "The Nest and Eggs of Traill's Flycatcher as Observed in Maine."²

1878. "The Nest and Eggs of the Yellow-bellied Flycatcher"³ [at Houlton, Me.].

1879. "The Loggerhead Shrike Breeding in Maine."⁴

1879. "MacFarlane's Gerfalcon in Maine."⁵

1880. "The Purple Gallinule in New England"⁶ [at Boothbay, Me.].

1882. "*Pelidna subarquata* [Curlew Sandpiper] on the Maine Coast."⁷

These writings show that he was one of the early ornithological visitors to the Umbagog and Houlton regions. He was probably the first to point out in print what he designated (and we do not remember finding any other name) as the St. Lawrence Maine Central water route⁸ [of migration].

He was a man of a peculiarly amiable disposition, and his friendship was cherished by all who came to know him.

¹Bull. Nutt. Orn. Club, I, p. 73.

²Ibid, I, pp. 75, 76.

³Ibid, III, pp. 166, 168.

⁴Forest and Stream, April 3, and May 8, 1879. Bull. Nutt. Orn. Club, IV, pp. 186, 187.

⁵Bull. Nutt. Orn. Club, IV, pp. 188, 189.

⁶Bull. Nutt. Orn. Club, V, p. 242.

⁷Ibid, VII, p. 124.

⁸Am. Nat., III, 1879, p. 331.

Mark Young.

Captain Mark Young, a Maine warden of the Audubon Societies, died at Matineus, April 3, 1911, at the age of seventy-four years and five months. Captain Young was appointed in 1900 as one of the first wardens in Maine, and continued his service to the time of his death. His colony of Herring Gulls, numbering upwards of ten thousand, with which several other birds were associated, is one of the largest, most important and interesting bird colonies in the State. While a man of ripened years at the time of his appointment, he entered into the spirit of protecting these birds with the zeal and enthusiasm of a boy. He was a man of sterling qualities. Besides those of his own community, all who have enjoyed the good fortune of a visit to the remarkable colony of birds under his guidance will mourn his death.

The Journal

of the

Maine Ornithological Society

A Quarterly Magazine Devoted to the Study and Protection of Birds

Vol. XIII

Published June, 1911

No. 2

SUBSCRIPTION RATES: \$1.00 a year; 25 cents a copy

The Maine Ornithological Society comprises in its membership the leading ornithologists and bird students of Maine. The membership is constantly increasing and the interest in the Society was never greater than now. If you are interested in birds and wish to know more about them you should by all means send in your name for membership in this Society. The dues are one dollar a year, and payment of this sum entitles each person elected to membership to the JOURNAL, free of charge. Application for membership should be made to the Secretary, Mr. Dana W. Sweet, Phillips, Maine. Mr. Sweet is also the Treasurer and the annual dues should be paid to him. All persons, both young and old, are eligible to membership. It is not necessary for one to be versed in bird lore in order to insure his election to this Society. The larger the membership the more can be done in the way of improving the JOURNAL, and increasing its size. Send in your name without further delay. The Society will be glad to welcome you to its meetings, which are held once a year in different cities.

The index to volumes I to XII inclusive of the JOURNAL is being put in shape for printing. The index is calculated to show every specific name, scientific, common and local, every author and title occurring in the first twelve volumes of the JOURNAL, with reference to every page where they occur. The index will make about twenty-five printed pages of a size uniform with the JOURNAL, of to-day, suitable for binding with it. The time of printing this will be governed to some extent by the demand. Advance orders are solicited on the basis of 50 cents per copy. These should be sent to JOURNAL, Maine Ornithological Society, 22 Elm street, Portland, Maine.

During the recent session of the Maine Legislature, the following measures relating to birds were passed:

An act creating a close time on Hider Ducks, from February first to October first, with the bag and sale restrictions of the gen-

eral law relating to Ducks. The close time for Snipe, Sandpipers, Plover and Shorebirds was made to commence on the first day of December, instead of the first of May. Kingfishers, Herons and Loons were restored to the list of protected birds, with the provision that the Commissioners of Inland Fisheries and Game have authority to destroy such of these birds as are found about fish hatcheries and feeding stations. The bag limit for Ruffed Grouse was reduced to five birds in one day, and the limit for Woodcock to ten in one day.

As an act, supplementing that, which prohibits the sale of birds and game in the State, the *purchase* and *sale* of the various game birds was made illegal. Also the sale by State officials, of game seized, which had been illegally killed or transported, was forbidden, the same to be given to the hospitals or other charitable institutions and a receipt taken for the same by the officials.

Maine also joined the ranks of the other New England States, New York and New Jersey, in protecting Wood Duck perpetually for a term, of four years. All of Maine, except Oxford county! Certainly, the gentleman of the most noted Oxford county town, that town which has furnished the country some leading men, is to be congratulated for distinguishing his county as the only spot in New England where Wood Ducks, universally regarded as approaching extinction, can be shot during the next four years!

The annual meeting of the New England Federation of Natural History Societies was held in Boston, April 21-22, 1911. An exhibition of specimens had been arranged and was successfully carried out. Two of the exhibits, birds in boxes for loan purposes, and bird skins in transparent celluloid tubes, for a similar purpose, were of especial interest to readers of the JOURNAL. Reports of the meeting can be obtained of Mr. James H. Emerton, Secretary, 194 Clarendon street, Boston, Mass.

Correspondents of the JOURNAL will please note that they should address JOURNAL, 22 Elm street, Portland, Maine. The former editor, Mr. Legge, has moved out of the State, and is put to some inconvenience to remail numerous communications sent to him.

Recent Publications.

REPORT OF THE COMMISSIONERS OF INLAND FISHERIES AND GAME OF THE STATE OF MAINE FOR THE YEAR 1910.

A pamphlet of one hundred and two pages, dealing with every aspect of the work of the commissioners, devotes nearly four pages to the Hungarian Partridge, and a colored plate of the same bird, showing four individuals. There is also a colored plate of the Mallard, together with the account of the same bird, the latter borrowed from Knight's "Birds of Maine". Nine pages are devoted to decisions of the Attorney-General pertaining to inland fish and game laws. Part of these decisions relate to birds.

1911. HEISMANN, MARTIN. HOW TO ATTRACT AND PROTECT WILD BIRDS. Translated by Emma Buchheim, with an introduction by Her Grace, the Duchess of Bedford. Second edition, with many revisions and many illustrations. London, Witherby and Co.¹

This is a volume of one hundred pages octavo, profusely illustrated by wood cuts, presenting what may be termed the intensive methods of attracting wild birds at all seasons, employed by Baron von Berlepsch, based upon a systematic study of the subject, conducted at his experimental station of about five thousand acres, at Seebach, district of Langensalza in Thuringia, Prussia.

The chapters and their sections discuss The Present Position in Regard to Protection, Reasons for Protecting Birds, History of Bird Protection, The Experimental Station at Seebach, The Creation and Maintenance of Nesting Places, Feeding Birds in the Winter, Suppression of their Enemies, The Necessity for Co-operation, and Calendar for Attracting and Protecting Birds.

Among other things, a good supply of water is mentioned as of primary importance. The illustrations make plain what is said of nesting places, and the numerous feeding devices. This forms an excellent supplementary companion to Trafton's "Methods of Attracting Birds".²

¹Distributed by the National Association of Audubon Societies, New York.

²This Journal, XII, p. 75.

1911. BEAL, F. E. L. FOOD OF THE WOODPECKERS OF THE UNITED STATES. Bull. 37, U. S. Biological Survey.

Sixty-four pages are devoted to this subject, giving summaries of the actual result of the material collected by the Biological Survey. This material amounts to 3,453 stomachs, representing sixteen species, and nearly twice as many sub-species of Woodpeckers taken in all parts of the United States and a few from Canada.

Of the eastern Woodpeckers, the Hairy, Downy, Three-toed and Pileated Woodpeckers are found to be positively beneficial and the same is true of the Flicker. The Yellow-bellied Sapsucker is regarded as injurious.

The paper is illustrated by six colored plates showing seven species of the birds treated, and three text figures.

1911. REA, PAUL M. A DIRECTORY OF AMERICAN MUSEUMS. Bull. Buffalo Soc. Nat. Sci., X:1.

A work of three hundred and sixty pages, presenting the museums of science, arts, history, and the zoological parks of the United States, Canada, Bermuda, Mexico, Central and South America, arranged alphabetically according to states and provinces. The museums are arranged alphabetically according to cities or towns. To each where the facts could be obtained is devoted a description of building, administration, departments, number of specimens in each department, historical sketch, financial support, scope of work, number of types and figured specimens and collection of especial interest or importance, also size and nature of library, if any, and publications issued.

Fourteen museums are reported for Maine (this number is too small), distributed at Augusta, Brunswick, Eliot, Hinckley, North Bridgton, Orono, Orr's Island, Paris, Poland Springs, Portland, Saco and Waterville.

By the aid of this work we are enabled to ascertain the strong quality of any particular collection, the activity of any particular institution, its location and usefulness to the public. The work is of value to the investigator, the historian and the tourist.

1911. MEARNs, EDGAR A. DESCRIPTION OF FIFTEEN NEW AFRICAN BIRDS. Smithsonian Miscell. Coll., 56:20.

This "fourteenth paper dealing with the results of Smithsonian African Expedition, under the direction of Col. Theodore Roosevelt," presents but one new species, a Francolin, *Francolinus griseescens*. Fourteen sub-species are also described as new.

SERIALS.

BRYOLOGIST, THE, XIII, Nos. 5, 6; XIV, Nos. 1, 2.

CASSINIA, XIV.

CONDOR, XIII, Nos. 1, 2, 3.

GUIDE TO NATURE, III, Nos. 9, 10, 11.

JACOB'S GLEANINGS, second supplement to No. 5.

ONTARIO NATURAL SCIENCE BULLETIN, No. 6, 1910.

NATURE AND CULTURE, II, Nos. 1, 3, 6.

SKETCH BOOK, THE, I, No. 9; II, No. 1.

WILSON BULLETIN, XXII, Nos. 3-4; XXIII, No. 1.

Bird Notes.

Notes and observations upon bird life within our State are earnestly desired for publication in this column from all our readers, and should be sent to THE JOURNAL, 22 Elm Street, Portland, Maine.

EARLY WINTER YELLOWLEGS (CORRECTION).—Through an editorial slip, the note on this bird by Mr. Walker, on page 22 of the last Journal, was cited *Totanus flavipes* instead of *T. melanoleucus*.—*A. H. Norton.*

THE YELLOW PALM WARBLER NEAR ELLSWORTH.—Every spring I look for the Yellow Palm Warbler on High Street in the willows above the river. This year (1910), such a cursory glimpse of them was not satisfactory. Donning heavy rubber boots, I followed them to a swamp three miles away. Here I found them evenly distributed and in song May 18. Last year they were common in this same locality on Aug. 11. Undoubtedly they nest here, but I was unable to find time to determine the fact this season.—*Cordelia J. Stanwood.*

SPRING BIRDS AT DAMASCUS, MAINE.—Fifteen miles west of Bangor, on the M. C. R. R., in the town of Carmel, lies the village of Damascus. It is well divided into upland and lowland, and between the hills on each side the Souadabscook stream runs in an easterly course directly through the village. There are numerous old fields and partially grown up pastures, together with small open pieces of woods, all combining to make a good field for one interested in bird study. It is the home of my boyhood, and about as many of my vacation days are spent there (I think more real ones) as in all other places of resort put together. I chanced to be there on April 16th, 1911, stopping with friends. At that time the snow was not all gone. There were patches here and there in shaded places, along the fences, and enough left in the woods to render walking unpleasant. Many of the birds had arrived, and it occurred to me to take a stroll over some of the places so near and dear to me on account of early associations, and report the result of my observations to the ORNITHOLOGICAL JOURNAL. The following birds were

seen: Song Sparrows, 32, Robins, 18, Rusty Grackles, 12, Bronzed Grackles, 2, Juncos, 2, Bluebirds, 3, also what appeared to be a pair of Wood Ducks, at a distance too great to make identity certain. The interest in these noble birds is now of such importance to us that I made a second visit to the same locality two weeks later for further investigation, when another pair of Ducks, still too far off, was seen, but nearer, enough so to make me feel reasonably sure of my birds. I shall endeavor to make another visit to the same waters, and to try and find them nesting, and should I be so fortunate will report the find in a later issue. The above observation does not include the usual numbers of Crows. According to my best judgment, based upon what little attention I have been able to give the matter, and by talking with others, I should say that the birds seemed to arrive later than usual this spring, say from one to two weeks, but there are more than the usual numbers of almost all kinds.—*A. L. Chase, Bangor, Maine.*



JAMES WOOD BRACKETT.

By courtesy of Maine Woods.

The Journal

of the

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Published by the Society on the first of March, June, September and December

Vol. XIII

SEPTEMBER, 1911

No. 3

James Wood Brackett.

Hon. James W. Brackett, chairman of the State Commission of Inland Fisheries and Game, died at his home in Phillips, on the morning of June 24th, of heart failure, as a consequence of accidental poisoning by aconite.

Mr. Brackett, the son of Nathan Cook and Louisa Wood Brackett, was born in Phillips, Maine, June 30, 1867. A part of his youth was spent at Phillips, and part at Harper's Ferry, West Virginia, where his father had moved. Owing to trouble with his eyes, he was obliged to abandon the college course which had been planned for him. Both at Phillips and at Harper's Ferry he became a leader in various diversions, including horsemanship and athletics.

In the early eighties, while very young, he became owner of the *Phillips Phonograph*. In this paper he gave an increasing amount of space to matters pertaining to fish and game, and the paper, which finally went forth under the name of the *Maine Woods*, came to devote fully half of its space to these interests, and became a recognized medium of publication by sportsmen and fishermen.

In 1904, Mr. Brackett was appointed a member of the Commission of Inland Fisheries and Game by Governor William T. Cobb, and on the 21st of June, 1910, he was appointed chairman by Governor Bert M. Fernald. He thus became the third chairman of the Commission as reorganized in 1895. He entered upon the duties of this office July 1, 1910, so his term of service, brought to so untimely an end, hardly compassed a year. It is fair to remember that this was a year during which his political party was in retirement, yet he worked in harmony with the administration, and handed down to history a most creditable showing for the period.

If we may judge from a short acquaintance, Mr. Brackett was a man of sanguine temperament, with faith that the good in the human race is in the ascendency. With this faith, his motto seemed to be, "The majority should rule, and it is the duty of those who serve to learn the will of the majority." Certain it is, that the columns of his paper were not only open to, but invited, full discussion of all matters of interest relating to fish and game. To everyone who sought his office he gave a respectful audience. Yet he was a man of spirit and determination in matters he believed to be right. His death brings to a close a most promising administration of this office, in which ornithologists feel so keen an interest.

He leaves a widow, Mrs. Lucy Bean Brackett, a son, James Scott Brackett, and a daughter, Miss Miriam Edna Brackett.

Notes on the Canada Warbler.

CORDELIA J. STANWOOD.

The spring of 1910 I varied my bird beat somewhat, and visited wilder woodlands and more inaccessible swamps. To my delight I came upon the haunts of new birds—the Canada Warbler, Winter Wren, Veery, American Bittern, Green Black-capped Warbler, Yellow Palm Warbler, Black-throated Blue and Parula Warblers.

The Canada Warbler was very common over a wide extent of territory. In fact, I found it common in three distinct swamps and

the woods adjoining. I was quite surprised to hear it sing in a swamp beside the Beechland schoolhouse. About two acres of alder swamp and open mixed growth surround the schoolhouse. The children play in these woods, and vehicles constantly traverse the street that borders the swamp. In all other cases the birds seemed to avoid civilization.

June 20, when walking carefully on the side of the lot farthest from the swamp, I heard something like a mouse or a large moth moving over the dry leaves under some young firs. Looking sharply, I caught a glimpse of what seemed to be a greenish-yellow, young bird—so young that its legs could not support it—flying over the leaves by the aid of its spread wings and tail. I concluded it was one of the common Nashville Warblers and was tempted to give it no further thought. Something impelled me to look more carefully. I hastened around the firs to intercept the weak, inexperienced little bird, and was really startled to find no trace of any bird anywhere around. In the trees a short distance away were two fine specimens of the Canada Warbler, but they were feeding leisurely and apparently unaware of my presence. Utterly nonplussed, I went back as nearly as possible to the point where I heard the sound and went over the ground cautiously on my hands and knees. I saw no nest. The ground was bare, the growth open. An examination of the roots of the trees revealed nothing. It seemed impossible for a bird to conceal a nest in this spot. Puzzled, I sat down some distance away and watched. Before long the female Canada Warbler came and caught insects from various perches near where I first noticed the bird. At this time I could see the bird was watching me quite as closely as the insects on which she feasted. I moved again, concealing myself as nearly as could be behind a stump. After ten or fifteen minutes the bird zig-zagged from the higher branches to the lower and was lost on the ground. Waiting a few instants for the bird to get well settled, I returned to the spot where the bird was lost to view and flushed her from the nest. She flew silently from the nest, then rustled away over the leaves as before. I had overlooked a rare bird's nest in spite of all my care. The nest was rather

large and contained four white eggs. The rufous spots were collected either in a ring around the larger end or on the crown. One egg was almost spotless on the sides. The bird called "cheh" once.

The following morning the female was again incubating. I did not disturb her.

The third day she was still incubating. She left the nest after I had lingered for some time. At first she trusted to her coloration, but when she knew that I saw her, she left the nest in the same manner as before.

On the fourth day the eggs were gone.

The outside of the nest was composed of dead poplar leaves, with the addition of a few dwarf cornel leaves, and the inner bark fibre of such young, dead trees as poplar, soft maple, and willow, a few white pine needles, a few decayed fern stipes, and several skeletonized leaves. The lining consisted of more minute threads of the inner bark fibre, and a few black horsehairs. Aside from the large, dry leaves on the outside, the material was fine. It must have taken a great deal of time to gather it. The nest was deeply cupped and the interior well shaped. It was placed between a moss-covered stump and the roots of a gray birch. When the gray bird was sitting, the nest was quite indistinguishable. The fact that the cavity was natural may have tended to make the nest less conspicuous.

The Canada Warbler has a tendency to keep low down in a thicket, where from a perch on a dead branch it has perfect freedom to catch insects on the wing. Frequently, however, it feeds in the treetops.

The tone quality of its song suggests that of the Winter Wren. It is liquid, bubbling, sparkling, clear, and irresistible. To me it is one of the most beautiful of Warbler songs.

These are some of the Canada Warbler's songs as they sound to me.

"Tit, tit, who is it?"

"Co, chit-u-it, chit-u-it."

"Chee, chit-u-it, chit-u-it."

"Chee, chit-u-it, wee, chit-u."

"Chee, chee, swee, chee, chee."

"Chit, chit-u-ee, chit-u-ee."

"Chet-eh-wee, chet-eh-wee, tee."

"Wee-chet-te-wee, wee-chet-te."

"Chee, chee, wee, wee, chee."

"Chee, chee, wee, chee, wee, wee."

This Warbler sings all day long. I have had him follow me about for a half day, singing all the time. Often he seems to sing in answer to other birds. I have heard him sing in response to the Redstart, the Black-throated Green, and the Magnolia. Sometimes he varies his song so much and seems to sing so pointedly in response to other bird songs that he has the appearance, at least, of engaging in a conversation.

The Canada Warbler was in full song this season from June 1 to July 12.

The call notes are "'tchip", "'tcheep", and "chuck".

Migration Reports, 1910.

Bird migration reports for the year 1910 were made by the following members at their respective stations: Sara C. Eastman, Portland, Cumberland County; Alton S. Pope, Brunswick, Cumberland County; Everett E. Johnson, Hebron, Oxford County; Edward C. Pope, Manchester, Kennebec County; Cordelia J. Stanwood, Ellsworth, Hancock County; J. Merton Swain, Farmington, Franklin County; Aaron Marden, Farmington, Franklin County; Dana W. Sweet, Avon, Franklin County.

Migration reports for the JOURNAL should be sent to D. W. Sweet, Phillips, Me. They should be arranged in the order in which they are given in the A. O. U. check list, and the name of the county should be placed on the report.

	PORTLAND.	BRUNSWICK.	HEBRON.	MAN'CH'R.	ELLS'TH.	FARMINGTON.	AVON.
Northern Loon,						April 12	April 23
Herring Gull,	July	30				April 24	
Wilson's Tern,							
Double-crested Cormorant,		April	26			April 12	April 7
American Merganser,							May 11
Black Duck,	March	26				April 12	
Wood Duck,						April 11	
American Golden-eye Duck,							
Canada Goose,		April	27	March	23		
American Bittern,		May	20	May	9		
Blue Heron,	{	Sept.	8	Sept.	10	April 13	May 5
						May	April 25
							Aug. 7
Green Heron,	May	27				April 25	
Black-crowned Heron,							
American Woodcock,						March 16	May 24
Wilson's Snipe,						April 6	
Semi-palmated Sandpiper,	July	29					
Solitary Sandpiper,						May 1	Aug. 23
Upland Sandpiper,						May 15	May 11
Spotted Sandpiper,	May	20				May 1	May 11
Semi-palmated Plover,	July	29				April 29	

Marsh Hawk,	July 26	April 27	April 14	June 16
Sharp-shinned Hawk,	May 6	March 24	April 15	
Cooper's Hawk,		Oct. 15		
American Goshawk,	Sept. 17	April 17	April 26	April 8
Red-tailed Hawk,		March 28	March 27	March 27
Red-shouldered Hawk,			April 26	April 27
Broad-winged Hawk,				
Pigeon Hawk,	Sept. 8		April 3	
Sparrow Hawk,	Jan. 1	April 10		May 7
Fish Hawk,		May 25		April 14
Snowy Owl,	Jan. 1			
Saw-whet Owl,				
Horned Owl,				March 26
Yellow-billed Cuckoo,	July 24	May 27	June 19	April 9
Black-billed Cuckoo,	July 6	June 3	June 1	May 26
Belted Kingfisher,	May 6		May 1	April 7
Yellow-bellied Woodpecker,	Sept. 24	May 13	April 15	April 15
Golden-winged Woodpecker,	April 2	March 30	April 4	March 16
Whip-poor-will,	June 20	May 16	May 22	May 18
Nighthawk,	May 26	May 20	May 5	May 12
Chimney Swift,	May 13	May 10	June 5	May 24
Ruby-throated Hummingbird,	May 19	May 26	May 15	May 19
Kingbird,	May 27	May 22	May 22	May 20
Crested Flycatcher,		May 21	May 15	May 17
Phoebe,	March 26	April 2	May 20	May 21
Olive-sided Flycatcher,		March 30	March 29	April 1
Pewee,	May 27		May 22	May 30
Yellow-bellied Flycatcher,				May 25
Alder Flycatcher,		May 28	May 22	June 8
Chelbec,	May 14	May 25	May 19	May 25
Prairie Horned Lark,			Feb. 24	May 8
Crow,	Jan. 1	Jan. 10	Feb. 1	March 19
Bobolink,	May 22	May 20	March 1	March 5
Cowbird,	April 2	Sept. 13	May 19	May 21
Red-winged Blackbird,	May 7	March 24	March 26	April 6
Meadowlark,	May 19	March 22	April 1	April 7
Baltimore Oriole,	May 19	May 21	May 18	April 25
Bronzed Grackle,	May 12	March 29	March 24	May 17

Rusty Grackle,	{ March 27	March 28 Sept. 13	March 25	March 24	April 25	April 25
Pine Grosbeak,	{ Nov. 19	Nov. 15	May 21			
Purple Finch,	{ April 2	March 30	Nov. 20	March 25	March 28	Oct. 28
Redpoll,	Sept. 8	May 18	March 16			Feb. 22
American Goldfinch,			Oct. 26	April 27	Jan. 20	Oct. 27
Pine Siskin,			Oct. 21			
Snow Bunting,	Nov. 18	Dec. 16	April 21	April 14	Oct. 23	
Vesper Sparrow,	May 6	April 10	April 17	April 28	April 18	
Savanna Sparrow,	July 29	April 10	April 22		May 17	
White-crowned Sparrow,			May 15	May 1	April 24	April 23
White-throated Sparrow,	April 27	April 21	April 22	April 6	March 28	April 2
Tree Sparrow,	{ March 26	Oct. 6	April 29	April 22	May 1	April 22
Chipping Sparrow,	April 27	April 14	April 29	May 6	April 23	
Field Sparrow,	May 6		March 20	March 27	March 27	March 24
Slate-colored Junco,	{ March 19	Oct. 23	March 16	March 15	March 24	March 25
Song Sparrow,	March 20	March 21	June 19	April 5	May 24	May 11
Lincoln Sparrow,			March 25	April 19	May 24	April 16
Swamp Sparrow,	{ March 22	March 20	Oct. 3			Oct. 29
Fox Sparrow,	Sept. 2	Oct. 14				
Chewink,	May 20			May 16	May 23	May 20
Rose-breasted Grosbeak,	June 20	June 17		May 21	May 20	May 18
Indigo Bunting,						May 15
Scarlet Tanager,					May 7	May 9
Purple Martin,	May 13	May 12	May 6	May 1	May 22	May 27
Cliff Swallow,	May 7	May 12	May 7	May 1	April 26	April 21
Barn Swallow,	May 6	May 21	April 17	May 1	May 23	May 13
Tree Swallow,	May 20	June 4	June 8	March 30	May 23	May 17
Bank Swallow,	March 25	Oct. 28	Dec. 1	April 3		
Cedar Waxwing,	Jan. 1	June 17	June 2	June 7		
Northern Shrike,	May 27					
Loggerhead Shrike,						
Red-eyed Vireo,						
Philadelphia Vireo,						

Warbling Vireo,	May	20	Sept.	16		June	3	April	9	May	17
Yellow-throated Vireo,								May	13		
Solitary Vireo,	Sept.	18	May	15	9	May	8	May	1	May	3
Black and White Warbler,	May	13			May	May	10	May	1	May	8
Nashville Warbler,	Sept.	11	May	18	22	May	2	May	2	May	11
Northern Parula Warbler,						May	19	May	3	May	10
Yellow Warbler,	May	20	May	2	May	May	19	May	17	May	19
Black-throated Blue Warbler,	May	13				May	16	May	14	May	18
Myrtle Warbler,	May	6	May	23	May	May	12	April	5	May	3
Magnolia Warbler,			May	25		May	18	May	18	May	17
Chestnut-sided Warbler,	May	27	May	25	May	May	18	May	15	May	19
Bay-breasted Warbler,						May	27			May	21
Black-poll Warbler,	May	11				May		May	19	May	28
Blackburnian Warbler,			May	8		May		May	1	May	18
Black-throated Green Warbler,	April	27	May	6		May		May	15	May	9
Pine Warbler,	April	27	April	25	April	April	29	May	15	May	
Yellow Palm Warbler,	April	27	Oct.	6	Oct.	April	23	April	5		
Ovenbird,	May	27	April	25	May	May	15	May	3	May	15
Northern Waterthrush,	Sept.	9			22	May		May	15	May	11
Mourning Warbler,										June	12
Northern Yellow-throat,	May	20	May	18	May	May	19	May	15	May	20
Wilson's Warbler,	May	20				July	9	May	16	Sept.	10
Canadian Warbler,						June	1	May	1	May	23
Redstart Warbler,	May	19	May	23	June	May	18	May	13	May	19
American Pipit,	{				5					May	5
Catbird,										Oct.	4
Brown Thrasher,	June	20	May	15	May	May	18	May	18	May	11
Winter Wren,					22	May	6	May	1	May	11
Ruby Kinglet,	{	May	8		13	May	11	April	3	May	25
Veery Thrush,										April	25
Gray-cheeked Thrush,	May	20			14	Oct.	8	May	15	Sept.	29
Olive-backed Thrush,					4	June	20	May		May	15
Hermit Thrush,	April	27	April	18	May	May	21	May	16	May	25
Robin,	March	20	March	21	March	April	10	April	13	April	17
Bluebird,	March	19	March	23	March	March	20	March	4	March	20
					12	March	13	March	4	March	22

The Journal

of the

Maine Ornithological Society

A Quarterly Magazine Devoted to the Study and Protection of Birds

Vol. XIII

Published September, 1911

No. 3

SUBSCRIPTION RATES: \$1.00 a year; 25 cents a copy

The Maine Ornithological Society comprises in its membership the leading ornithologists and bird students of Maine. The membership is constantly increasing and the interest in the Society was never greater than now. If you are interested in birds and wish to know more about them you should by all means send in your name for membership in this Society. The dues are one dollar a year, and payment of this sum entitles each person elected to membership to the JOURNAL, free of charge. Application for membership should be made to the Secretary, Mr. Dana W. Sweet, Phillips, Maine. Mr. Sweet is also the Treasurer and the annual dues should be paid to him. All persons, both young and old, are eligible to membership. It is not necessary for one to be versed in bird lore in order to insure his election to this Society. The larger the membership the more can be done in the way of improving the JOURNAL, and increasing its size. Send in your name without further delay. The Society will be glad to welcome you to its meetings, which are held once a year in different cities.

The sixteenth annual meeting of the Maine Ornithological Society will be held November 24th and 25th, with afternoon and evening sessions on the 24th, and probably a forenoon session on the 25th. The annual meeting is a most suitable occasion for the members of the Society to present some of their season's results. Even when not able to be present, these contributions show an interest that is of great importance to those who can attend, and who, in the past, have been active in the preservation of the organization. The programme and place of meeting will be duly announced by the Secretary.

The week of July 8th to 15th, Mr. T. Gilbert Pearson, Secretary of the National Association of Audubon Societies, was in Maine, making a tour of inspection of the colonies of birds which the Association has been guarding by wardens. Mr. Pearson was accompanied by Mr. Arthur H. Norton, of Portland. With a week of excellent weather, the trip was pushed without interruption, and all of the important colonies were visited. In general, the condition of the colonies was found to be excellent. Mr. Pearson's report, together with his impressions of Maine bird life, which will appear in the annual report of the Audubon Society in *Bird-Lore* for November-December, will be of much interest to all, and especially to New England readers.

The autumn meeting of the New England Federation of Natural History Societies will be held at Lawrence, Mass. (R. R. station, North Lawrence), Friday and Saturday, September 29 and 30, in connection with the societies of Lawrence and Andover. A Natural History exhibition, to which all persons interested are invited to contribute, will be open all day Friday and until noon on Saturday, at the vestry of the Unitarian Church, corner of Jackson and Haverhill Streets. The collections of the Lawrence Natural History Society will also be open to visitors at their rooms in the Central Building.

Friday evening at 8 o'clock there will be a public meeting of the Federation at which the natural history of the water and sewage of Lawrence and Andover will be discussed.

Saturday afternoon the meeting will be in Andover. Visits will be made to the "Indian Ridge," a gravel hill near the town, and to the Archæological Museum of Phillips Academy.

Circulars are to be had of J. H. Emerton, Secretary, 194 Clarendon St., Boston.

Recent Publications.

1911. NELSON, E. W. DESCRIPTION OF A NEW GENUS AND SPECIES OF HUMMINGBIRD FROM PANAMA. Smithsonian Miscell. Collections, 56: No. 21, pp. 2.

This new Hummingbird, from the dwarfed forests of the mountain, Cerro Azul, Panama, is named *Goldmania violiceps*. It is known only from 2,500 to 3,000 feet altitude.

1911. YEAR BOOK UNITED STATES DEPARTMENT OF AGRICULTURE, 1910.

1911. COOKE, WELLS W. THE MIGRATORY MOVEMENTS OF BIRDS IN RELATION TO THE WEATHER. Year Book U. S. Dept. Agriculture, 1910, pp. 379, 390, and a map.

In this paper Mr. Cooke says, by way of conclusion: "The foregoing facts show conclusively that the weather conditions are not the cause of the migration of birds, but that the weather, by influencing the food supply, is the chief factor which determines the average date of arrival at the breeding grounds. Migration is undertaken in response to physiological changes in birds, and the date of starting, in the case of most species, bears no relation whatever to the local weather conditions in the winter home. The weather encountered en route influences migrations in a subordinate way. . . . Spring migration usually occurs with a rising temperature, and the movements of autumn with a falling temperature. In each case the change seems to be a more potent factor than the absolute degree of cold. . . . Each species, and each group of individuals of a species, is a law unto itself."

1911. MCATEE, W. L. OUR GROSBEAKS AND THEIR VALUE TO AGRICULTURE. Farmers' Bulletin No. 450, U. S. Dept. Agriculture, pp. 14, and three cuts.

Treats of the food habits of Rose-breasted, Cardinal, Black-headed, Blue and Gray Grosbeaks, means of preventing damage to crops by Grosbeaks, and how to attract and protect Grosbeaks.

In conclusion we are told, "The services of Grosbeaks in

destroying insect pests are invaluable. Each kind pays special attention to certain pests, which if unchecked would cause enormous losses. Few of our birds are to be credited with more good and with fewer evil deeds."

1911. MCATEE, W. L. OUR VANISHING SHOREBIRDS. Circular No. 79, U. S. Biological Survey, 9 pages, with three full-page figures.

In the summary of this brief paper Mr. McAtee says: "Shorebirds have been hunted until only a remnant of their once vast numbers are left. Their limited powers of reproduction, coupled with the natural vicissitudes of their breeding period, make their increase slow, and peculiarly expose them to danger of extermination.

1911. OLDYS, HENRY. THE GAME MARKET OF TO-DAY. From Year Book U. S. Dept. Agriculture, pp. 11, with six maps.

1911. OLDYS, HENRY, BREWSTER, C. E., AND EARNSHAW, FRANK L. OPEN SEASONS FOR GAME IN THE UNITED STATES AND CANADA, 1911. Poster No. 24, U. S. Biological Survey.

1911. OLDYS, HENRY, BREWSTER, C. E., AND EARNSHAW, FRANK L. GAME LAWS FOR 1911. Farmers' Bulletin No. 470, U. S. Dept. of Agriculture, pp. 52, with two maps.

1911. PALMER, T. S. DIRECTORY OF OFFICIALS AND ORGANIZATIONS CONCERNED WITH THE PROTECTION OF BIRDS AND GAME, 1911. Circular No. 83, U. S. Biological Survey, pp. 16.

1911. PALMER, T. S., AND OLDYS, HENRY. PROGRESS OF GAME PROTECTION IN 1910. Circular No. 80, U. S. Biological Survey, pp. 36.

SERIALS.

BRYOLOGIST, XIV, No. 4.

CONDOR, XIII, No. 4.

MAINE WOODS, weekly, July and August.

WILSON BULLETIN, XXIII, No. 2.

Bird Notes.

Notes and observations upon bird life within our State are earnestly desired for publication in this column from all our readers, and should be sent to THE JOURNAL, 22 Elm Street, Portland, Maine.

SOME OBSERVATIONS NEAR ISLE AU HAUT.—I have just returned from a trip in Jericho Bay, with headquarters at Isle au Haut, and thought the JOURNAL readers might be glad to hear about the birds in that section. I was accompanied by Mr. F. M. David. Of the Eiders we saw a dozen nests with eggs or young. The Gulls are in large numbers on Little Spoon Island. There are numbers of Terns on both of the Spoon Islands and many Petrels on Big Spoon. There are also Gulls on both of the Horse Ledges, and Shags on the Black Horse. We saw a number of Ravens, and in a nest on Big Spoon Island, from which the young had long since departed, we found an infertile egg. We also saw a pair of Shel-drakes and a pair of Old Squaws about the Spoon Islands.—*J. Mer-ton Swain, Farmington, Me.*

HORNED LARKS NEAR HINCKLEY.—The morning of July 26th, while driving to Hinckley to take the train, I saw a flock of about twenty-five Horned Larks on the sandy plains east of the Kennebec River. Although not able to identify the birds subspecifically they were doubtless Prairie Horned Larks.—*O. W. Knight.*

THE NATAL DOWN OF CHIPPING SPARROWS.—Until this summer (1910), I had never happened to see Chipping Sparrows just out of the shell. The nest was very familiar to me, but I had heretofore either found nests too high up to be observed easily or they already held young when discovered. This season a structure on the level with my eyes contained four eggs when I came upon it. I visited the nest each morning and timed one observation trip so that I saw three young that were just hatched. The nestlings were so strong that they raised their heads for food and kept them in that posture for a length of time. What astonished me most was the fact that the young were nearly as well covered with burnt umber natal down as the woolly bear caterpillar is with hairs. The four active,

thickly coated birds in the tiny nest made an interesting picture. They grow so rapidly that the thick coat of down is not conspicuous after the first few days. I presume the thick natal down on newly hatched birds and the unusual strength indicate great vigor in the Chipping Sparrow.—*Cordelia J. Stanwood, Ellsworth, Me.*

WHY WOODPECKERS AND CHICKADEES ARE PRONE TO USE CEDAR AND POPLAR TRUNKS AS NESTING SITES.—The "knot" in resinous trees remains sound much longer than the trunk. From this fact has arisen the old saying, "as tough as a pine knot". There are no "knots" in cedar and poplar trees, merely knot holes. These knot holes have suggested to birds from time immemorial good nesting sites. Two sets of Chickadees this year (1910) began excavating dead fir stumps. Soon such a deadly array of spear points bristled at them down the sides of the cavity that they gave up work on those stumps in despair.—*Cordelia J. Stanwood, Ellsworth, Me.*

LATE NESTING HERMIT THRUSH.—The following observation on the eggs and young of the Hermit Thrush, owing to the lateness of date, I thought might be of special interest. The nest and three eggs were discovered about July 15th, under a small witch-hazel bush near the edge of the woods, about twenty-five feet from my camp at East Pond, Oakland. They were not approached again until July 22nd, when the young had hatched. The nest was not approached again till Saturday, July 29th, after the heavy storm. All three young birds were found dead on the ground about a foot from the nest, and each one appeared to have been pecked or eaten either in the head or the side of the breast. This, however, may have been done by some worm or beetle. They had not been dead more than a few hours. I wonder if the old bird would desert them, or if the drenching, driving rain would have killed them under her wings. This is the second family of Hermit Thrushes hatched on our grounds this year. The other was about one week earlier in hatching.—*Chas. M. Lamprey, Oakland, Me.*

NOTES ON LEACH'S PETREL AND OTHER BIRDS.—I took my vacation this year off the coast of Maine and visited the islands known as Wooden Ball and Seal Island, off Rockland, Maine. You may remember the short article in *Bird-Lore* which I wrote last year, after visiting the first of the above-named islands, and in which I described how the cats owned by the fishermen were killing all the Leach's Petrels on the island, by catching them on their nests and bringing the old birds to the door of the cabin to eat, and how the ground before the cabin was black with the carcasses of the Petrels. I believed then that the dog on the island was digging up the Petrels also, from the destroyed burrows. We could not find an occupied nest at that time, though in the height of the breeding season. This year the lady on the island said that there were no Petrels on the island that she knew of, and that she guessed that her cats had caught them all. On Seal Island there was a considerable colony of Petrels this year, and we went to see them, followed by one of the two dogs on the island. We could see the burrows and also the same dug and broken burrows as seen on Wooden Ball last year. While we were looking the dog began to dig, and before we realized what he was about he had the sitting bird and ate her alive, all but her wings and some feathers. We drove him away and he promptly started to dig again, but my companion was quick enough to take from him the second Petrel before he had injured it. While we were looking at the bird, the dog returned and pulled the young bird from the burrow with his paw and with a few gulps swallowed it, feathers and all. We could not stay long on the island, and as we left I could see the dog still among the Petrel's burrows digging after more. With the hand of man stayed by restrictive laws, and the Petrels a supposedly protected colony, it seemed as though something should be done to stay the destruction wrought by the cats and dogs on these islands. I found the Gulls on No Man's Land in a prosperous condition, and also the Terns on Matinicus Rock, in marked contrast to the Petrel on the aforementioned islands. I imagine that you are helpless as far as law goes in this case, and I know that the Petrels are in poor standing with the fishermen, because of their noise at night and their smell, but still hope that something might be done with the fishermen whereby their dogs, at least, might be kept from destroying the nest and birds when away from the cabins.—*Wilbur Smith, South Norwalk, Conn.*

The Journal

of the

Maine Ornithological Society

Published by the Society on the first of March, June, September and December

Vol. XIII

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No. 4

Announcement.

With this number the issue of the JOURNAL, as a regular publication, will be discontinued. This action is taken with the unanimous approval of the council and most of the members who have been active in the Society.

In order to leave our JOURNAL complete, so far as it goes, an index, already announced, will be extended to cover this volume, the thirteenth, and will be published as early as possible during the current year. To provide for the publication of this index, the annual subscriptions are now requested, and all subscribers forwarding the regular charge of one dollar will receive the index as soon as issued. The same charge will be made to all others who wish a copy. All subscribers who sent advance payments for the index in response to an earlier announcement will, of course, receive the index without further payment.

All members forwarding their assessments, and those failing to respond will be understood to agree to the plan to discontinue the JOURNAL.

This is not to be understood as a dissolution of the Society, which will continue as a social and scientific organization until otherwise determined.

Winter Breeding of the American Crossbill.

BY CLARENCE H. CLARK.

The date in the entry in my journal may make the item of some interest to the readers of the JOURNAL of the Society.

While a crew of lumbermen were at work about ten miles from Lubec, Me., on January 29, 1910, they noticed, to their surprise, some small birds roll out of a tree which they had just cut down. On investigation they found a nest and three small birds about three weeks old, two of which had been killed by the fall. The living one was brought to me and identified as a Red or American Crossbill. It died two days afterwards and I had it mounted.

The eggs from which these birds were hatched must have been laid during the latter part of December.

A Robber Baron.

By CORDELIA J. STANWOOD.

Walking in a lonely piece of woods I was somewhat startled by a buzzing sound. A Hairy Woodpecker immediately struck against one side of a tree, and the maker of the noise, a Humming Bird, alighted on the other. There the big fellow crouched in abject terror, while the little fellow jabbed at him, first around one side of the tree, then around the other side of the tree. This one-sided battle continued for some time, when the Hairy Woodpecker sought another tree only to be closely pursued by his tormentor.

Probably the Woodpecker was goaded to his duty by necessity — a nest of young waiting for food but a few yards distant. At any rate, in spite of the jabs of his persecutor, he began to bore holes for insects. When he had drilled a hole the Humming Bird descended upon him and drove him away. I did not see that the Humming Bird reaped any material benefit from this rough warfare. After a time he left the Woodpecker to his work, but still lingered in the neighborhood.

Not long since I saw a Humming Bird pestering two Black-throated Green Warblers who were feeding young in the trees.

Migration Reports.

The following reports for the year 1910 were made by: D. W. Sweet, Avon, Franklin County; Cordelia J. Stanwood, Ellsworth, Hancock County; E. C. and A. S. Pope, Manchester, Kennebec County; Everett Johnson, Hebron, Oxford County; Sara C. Eastman, Portland, Cumberland County.

Reports of the dates of arrival for 1911 were made by: Alton S. Pope, Manchester, Kennebec County; Cordelia J. Stanwood, Ellsworth, Hancock County; Aaron Marden, Farmington, Franklin County; D. W. Sweet, Avon, Franklin County.

	1910. DATES OF DEPARTURE.		1911. DATES OF ARRIVAL.	
	AVON. EL'W'TH. M'N'CT'R. HEBRON. P'TE'ND. M'N'CT'R. EL'W'TH. F' M'TON. AVON.			
Herring Gull,		Oct. 21	Apr. 19	May 7
American Merganser,	Sept. 16			
Black Duck,	May 11		" 24	
Canada Goose,		Apr. 2	Mch. 30	Mch. 19
American Bittern,				" 25
Blue Heron,	{ Apr. 25		Apr. 25	
American Woodcock,	{ Oct. 13	Oct. 23		July 17
Wilson Snipe,	" 28	" 18	" 8	
Solitary Sandpiper,	" 29			
Bartramian Sandpiper,	Sept. 3		May 10	June 14
Spotted Sandpiper,	" 4			May 7
Marsh Hawk,	" 2	Oct. 16	Oct. 1	May 30
Sharp-shinned Hawk,	" 2	" 9	Aug. 10	Apr. 28
Cooper's Hawk,			Sept. 8	Apr. 14
Red-tailed Hawk,			Oct. 2	" 26
Red-shouldered Hawk,				May 1
Broad-winged Hawk,	Aug. 14	" 30	Oct. 23	
Pigeon Hawk,	" 29	Sept. 27	Mch. 29	
Fish Hawk,	Oct. 15	" 23	" 28	Apr. 29
Short-eared Owl,		Dec. 15	May 7	May 7
Richardson's Owl,				Mch. 12
Saw-whet Owl,			Mch. 6	

Savanna Sparrow,		July 30		Sept. 16	Oct. 1	Apr. 14	Apr. 15
White-crowned Sparrow,							May 16
White-throated Sparrow,							Oct. 8
Tree Sparrow,	{ May 17	Oct. 17	Oct. 14	Nov. 3	" 21	May 2	Apr. 29
Chipping Sparrow,	" 3	" 14	" 23	Mch. 19	Feb. 11	" 1	Apr. 24
Field Sparrow,				Oct. 6		" 11	" 27
Slate-colored Junco,	" 14	Nov. 13	Apr. 9	Apr. 1	Mch. 26	Mch. 30	" 28
Song Sparrow,	Oct. 29	" 4	Oct. 25	Nov. 4	" 30	" 30	" 5
Swamp Sparrow,	{ Apr. 16	July 16		May 3	May 11	May 16	" 29
Fox Sparrow,	/ Oct. 29	Oct. 28		" 10	Apr. 2	Mch. 31	" 14
Rose-breasted Grosbeak,					June 10	May 16	May 18
Indigo Bunting,				July 4	" 10		" 19
Scarlet Tanager,							" 12
Purple Martin,		Aug. 29		May 5	" 27	Apr. 24	Apr. 29
Cliff Swallow,	Aug. 24	" 18	Sept. 3	" 2	May 9	May 9	May 9
Barn Swallow,	Sept. 3	" 25	" 5	Sept. 1	" 27	Apr. 20	Apr. 28
Tree Swallow,	Aug. 19	July 29		Aug. 31	" 24		Apr. 29
Bank Swallow,					July 2	May 11	May 11
Cedar Waxwing,		Aug. 18	" 22	Sept. 26	Oct. 2	June 3	" 27
Northern Shrike,		Dec. 1					Dec. 11
Loggerhead Shrike,					June 10		Apr. 16
Red-eyed Vireo,		Sept. 16	" 20	Aug. 14	Sept. 9	May 13	May 19
Warbling Vireo,			" 17		May 20	" 23	May 22
Solitary Vireo,		Oct. 9			" 6	May 15	Apr. 28
Black and White Warbler,		Sept. 20			" 6	Apr. 26	May 7
Nashville Warbler,		" 25			" 10		" 12
Northern Parula Warbler,		" 15			" 12		" 7
Yellow Warbler,		July 25		" 6	" 18	May 5	" 15
Black-throated Blue Warbler,		Sept. 6			" 10		" 12
Myrtle Warbler,		Oct. 20	Oct. 17	Oct. 9	Oct. 21	Apr. 15	Apr. 28
Magnolia Warbler,	Sept. 2	Sept. 7			May 12	" 15	May 12
Chestnut-sided Warbler,	Oct. 7	Sept. 16			" 13		" 12
Bay-breasted Warbler,	May 21	Sept. 10			June 6		" 21
Blackpoll Warbler,	June 11						" 15
Blackburnian Warbler,							" 12
Black-throated Green Warbler,	Oct. 7	Oct. 7		Sept. 20	May 8		

Pine Warbler,	Sept. 10	Oct. 6	Sept. 23	May 27	Apr. 16	Sept. 24
Yellow Palm Warbler,	Oct. 17	Sept. 17			May 12	May 12
Ovenbird,	Sept. 11					" 7
Northern Water-thrush,		" 14			" 13	" 19
Mourning Warbler,	Oct. 13					" 19
Northern Yellowthroat,	Sept. 8				" 14	" 12
Wilson Warbler,	Aug. 30	Aug. 15			" 13	" 12
Canadian Warbler,	Sept. 15					" 17
Redstart,	Oct. 7					
American Pipit,	May 16					
	Oct. 4					
Catbird,	July 4	Sept. 30	" 9	June 2	" 29	Sept. 29
Brown Thrasher,	Aug. 17	Sept. 18	" 9	May 11	" 8	May 15
Winter Wren,	Oct. 9	" 20			" 3	" 15
Brown Creeper,					Apr. 15	Apr. 28
Ruby Kinglet,	May 9			Apr. 28	" 13	Sept. 24
	Oct. 5	Oct. 23	Oct. 21			Sept. 24
Veery Thrush,	" 8				May 10	May 13
Olive-backed Thrush,	July 24				" 12	" 21
	Aug. 21					
Hermit Thrush,	Oct. 20		" 29	" 26	Apr. 15	Apr. 18
Robin,	Nov. 2	Oct. 30	Nov. 19	Mch. 30	Mch. 31	" 7
Bluebird,	Oct. 15	" 29	Oct. 6	" 28	" 26	" 8

Recent Publications.

1911. ABBOTT, CLINTON G. THE HOME LIFE OF THE OSPREY. Photographed and described by Clinton G. Abbott, B. A., Associate of the American Ornithologists' Union, with some photographs by Howard H. Cleaves, Associate of the American Ornithologists' Union. With thirty-two mounted plates. London: Witherby & Co., 326 High Holborn, W. C. This work may be obtained at Brentano's, 229 Fifth Avenue, New York City. Price, \$2.00.

This is a most interesting and carefully prepared presentation of the author's studies of the breeding habits of this large semi-social bird of prey, conducted under the most favorable conditions afforded in North America if not in the world. The fifty-four quarto pages of text present a full, though not exhaustive, biography of the Ospreys from the time of reaching their breeding places, in New Jersey and Long Island Sound, until the young leave the nest. The work, as implied, deals with the biographical aspect of the subject, almost entirely, and though the observations center about Long Island Sound, New Jersey and North Carolina, the treatise amply represents the habits of the species, through judicious comparisons of records drawn from the literature.

The thirty-two mounted plates present forty-two excellent photographs from life.

The work is one that can hardly fail to please the bird lover, and, sad to say, in a large part of New England, where the Osprey has been extirpated, is calculated to give a knowledge to many readers of the home life of one more of the many birds now known only in passage.

1911. BUCKLAND, JAMES. PROS AND CONS OF THE PLUMAGE BILL. Printed by Edward Evans, Ltd., the Racquet Court Press, London. S. E. [No date.]

In this pamphlet of nineteen pages Mr. Buckland says: "The most plausible argument that can be brought against legislating for the prohibition of the import of the feathers of certain wild foreign birds is that it would divert the traffic in ornamental plumage from London to the Continent; deprive thousands of British workers of their employment; and not save the life of a single bird.

"My object in writing this pamphlet is to prove—as I believe I shall be able to do—that the Plumage Bill, which is now in the Commons, will not divert the traffic in feathers from London; will benefit materially, and not injure, the working classes; and, finally,

will rescue many a fast-disappearing species from utter annihilation."

The points of the argument are of general interest.

A limited number of copies are to be had at 22 Elm St., Portland, Me., on request, with two-cent stamp for postage.

1911. BURNS, FRANK L. A MONOGRAPH OF THE BROAD-WINGED HAWK (*Buteo platypterus*). By Frank L. Burns, with the co-operation of over one hundred American ornithologists, and the compilation of the world's literature. Wilson Bulletin, Volume XXIII, Nos. 3 and 4.

The September and December numbers, covering pages 143 to 320, of the Wilson Bulletin, are devoted entirely to the presentation of Mr. Burns' exhaustive study of the Broad-winged Hawk.

We find diagnosis of genus, species and subspecies, description and synonymy of species and subspecies, vernacular names, geographical and local distribution, flight, food, voice, enemies, disposition in presence of other birds, disposition in presence of men, disposition in captivity, migration, station, mating, nidification, incubation, young, moult and renewal, and bibliography. Mr. Burns has given much credit to authors consulted and to his own correspondents. We may perhaps wish that he had generalized more from the large mass of data examined. The bibliography occupies nearly thirty-seven pages, and the author mentions that it contains more than seven hundred titles. Fourteen half-tone figures also accompany the paper.

That Mr. Burns' work is exhaustive can hardly be doubted.

1911. BEEBE, C. WILLIAM. A CONTRIBUTION TO THE ECOLOGY OF THE ADULT HOATZIN. Smithsonian Report for 1910, pp. 527, 543.

Mr. Beebe here discusses the history, name, distribution, general appearance, parasites, field notes in Venezuela and British Guiana, food, nests and eggs, enemies, photographing Hoatzins, and odor, and concludes with a bibliography of forty-eight titles. Seven half-tone plates illustrate the paper. It also contains a map showing the known distribution of the bird.

1911. COOKE, W. W. DISTRIBUTION OF THE AMERICAN EGRETS. Circular 48, Bureau of U. S. Biological Survey.

Two species, *Herodias egretta* and *Egretta candidissima*, are treated, each with a map of distribution.

1911. DUERDEN, PROF. J. E., M. Sc., Ph. D., A. R. C. S.

THE PLUMAGES OF THE OSTRICH. Smithsonian Report for 1910, pp. 561, 571, with plates 1-8.

This paper deals with the "chick plumage, juvenal plumage, and adult plumage" of the Ostrich, and is reprinted (with other corrections) from the Agricultural Journal of the Union of South Africa.

1911. GOLDMAN, E. A. A NEW KINGFISHER FROM PANAMA. Smithsonian Miscellaneous Collection, 56, No. 27.

This is a southern subspecies of *Ceryle americana*, named *isthmica*, having a range from Guatemala to Panama, where the type was obtained.

1911. HENSHAW, HENRY W. MIGRATION OF THE PACIFIC PLOVER TO AND FROM THE HAWAIIAN ISLANDS. Smithsonian Report for 1910, pp. 545, 559.

This is a presentation of one of the very remarkable migratory flights, of the many remarkable ones now known to be performed by this order of birds, and it is considered and discussed from many points of view. The points considered under the caption "Why the Plover Migrates" are of very general interest, presenting, we believe, the real reason why birds migrate; first, a failure of food, and second, responding to physiological promptings, returning to the place of birth to breed.

1911. HENSHAW, HENRY W. REPORT OF THE CHIEF OF THE BUREAU OF BIOLOGICAL SURVEY FOR 1911. Annual Report of the Department of Agriculture.

In this report of twenty pages, Mr. Henshaw has stated the work accomplished during the year, and outlined that for 1912. The amount of work, both done and proposed, is large and important.

1911. MCATEE, W. L. THREE IMPORTANT WILD DUCK FOODS. Circular 81, Bureau of Biological Survey.

Of the large variety of plants furnishing food for wild ducks, Mr. McAtee considers three genera as of especial importance. These are, to use his own order, wild rice (*Zizania aquatica*), wild celery (*Vallisneria spiralis*), and pond weeds (*Potamogeton*), a genus having a large number of species and a wide distribution.

Though many species of pond weeds are eaten, *Potamogeton pectinatus*, sago or fennel-leaved pond weed, and *P. perfoliatus*, clasping-leaved pond weed, also known as redhead or duck grass, are of especial importance. The illustrations show the distribution of the plant discussed, figure of the species and of the parts eaten.

These are useful in identification. Methods of transplanting and propagating the plants are considered.

1911. MEARNS, EDGAR A. DESCRIPTIONS OF SEVEN NEW AFRICAN GRASS WARBLERS OF THE GENUS *CISTICOLA*. Smithsonian Miscellaneous Collection, 56, No. 23.

Two species and five subspecies are here proposed. This is the fifteenth paper based upon the results of the Smithsonian African Expedition, under the direction of Col. Roosevelt.

1911. MEARNS, EDGAR A. DESCRIPTION OF A NEW SPECIES OF SUN-BIRD (*Helionympha raineyi*) FROM BRITISH EAST AFRICA. Smithsonian Miscellaneous Collection, 56, No. 28.

This is from the first lot of birds sent to the United States National Museum by the Rainey African Expedition.

1911. WRIGHT, HORACE W. THE BIRDS OF THE JEFFERSON REGION IN THE WHITE MOUNTAINS, NEW HAMPSHIRE. Proceedings Manchester Institute of Arts and Science, Vol. V, pp. 1-126.

The author tells us that the region covered by this paper includes primarily the territory of the town of Jefferson, also the adjoining towns of Lancaster, Whitefield, Carroll, and Randolph and the northern and western slopes of the Presidential Range to the Crawford House Plateau.

Twelve pages are devoted to a description of the region, in its features affecting the bird life thereof, ninety-eight pages to the annotated list of the birds, nearly six pages to additional notes for the season of 1911, and eight pages to a good index. The annotated list and the additional notes present 188 species and subspecies (or names) of birds that have been found in the region. The annotations are full, sometimes extended, and based almost entirely on the personal observation either of the author, or a number of his correspondents, to whom credit is carefully given.

Published records seem to have been resorted to only where more recent observations are wanting; while this course may have certain advantages in works of this kind, it eliminates oftentimes interesting data. In the case of this list we might instance the records of the Spruce Partridge for two seasons at Crawfords (*Auk*, XXVI, pp. 428, 429).

Probably the White Mountain region, from all points of view, affords the most interesting and important physical and biological features of the State of New Hampshire, and Mr. Wright's contribution to the bird life of the section will be deservedly appreciated.

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June, 1911

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